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**DPsych Health Psychology: applied Health  
Psychology within Health Promotion**

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Submitted May, 2009



## CONTENTS

|  | pg  |
|--|-----|
| <b>Acknowledgements</b>  | 7   |
| <b>Declaration</b>   | 8   |
| <b>SECTION A Preface</b>   | 9   |
| <b>SECTION B Research</b>  | 19  |
| Can a sexual health DVD change the cognitive antecedents of condom use in school pupils? An experimental evaluation of "Bedroom Business"  |     |
| Abstract   | 21  |
| Introduction   | 23  |
| Method   | 69  |
| Results  | 91  |
| Discussion   | 117 |
| References   | 157 |
| <b>SECTION C Professional Practice</b>   | 177 |
| <b>Unit 1</b> Generic Professional Competence: Supplementary Report  | 179 |
| <b>Unit 3</b> Consultancy Case Study: Development, implementation and evaluation of You're Welcome (Department of Health, 2007); A young people friendly accreditation of scheme for health services | 197 |
| <b>Unit 4</b> Teaching and Training Case Study 1: Teaching MSc Health Psychology students  | 225 |
| Teaching and Training Case Study 2: Workshop on reflective practice and personal values in sexual health for community nurses  | 235 |
| <b>Unit 5.1</b> Implementing Interventions to Change Health-Related Behaviour Case Study: Implementing an intervention: delivering stop smoking group interventions                                  | 247 |
| <b>Unit 5.2</b> Directing the Implementation of Interventions Case Study: Directing stop smoking interventions of health professionals in primary care   | 269 |
| <b>SECTION D Systematic Review of Literature</b>   | 291 |
| Psychological interventions for weight loss maintenance for obese or overweight adults: A systematic review  | 293 |

## LIST OF TABLES AND ILLUSTRATIONS

| <b>TABLES</b>        |  | <b>pg</b> |
|----------------------|--|-----------|
| <b>SECTION B</b>     |  |           |
| Table B1             | Coding Frame for the Bedroom Business DVD  | 63        |
| Table B2             | Cronbach's alpha co-efficient  | 94        |
| Table B3             | Correlations between the cognitive antecedents of condom use                                 | 96        |
| Table B4             | Variance ratios for variables with a significant Levene test                                 | 99        |
| Table B5             | Variance ratios for variables after transformation with a significant Levene test            | 101       |
| Table B6             | Pre-intervention and post-intervention means and standard deviations                         | 106       |
| Table B7             | Differences in dependent variables (casual partner) at one month follow up                   | 108       |
| Table B8             | Differences in dependent variables (steady partner) at one month follow up                   | 109       |
| Table B9             | Results of the Qualitative Analysis  | 112       |
| <b>SECTION C</b>     |  |           |
| Table C1             | Client Information   | 251       |
| Table C2             | Outcome of stop smoking groups   | 262       |
| Table C3             | Performance of Level 2 advisors  | 286       |
| <b>SECTION D</b>     |  |           |
| Table D1             | Main characteristics of the six included studies in the systematic review                    | 305       |
| Table D2             | Summary of Results   | 314       |
| <b>ILLUSTRATIONS</b> |  |           |
| <b>SECTION B</b>     |  |           |
| Figure B1            | The Theory of Planned Behaviour  | 46        |
| Figure B2            | Responses to "How much do you like the Bedroom Business film?"                               | 110       |
| Figure B3            | Responses to "How much did you learn in the session?"  | 110       |
| Figure B4            | Responses to "Would you recommend watching the Bedroom Business film to other young people?" | 111       |
| <b>SECTION C</b>     |  |           |
| Figure C1            | Confidence ratings for values and self-reflection before and following the training session  | 242       |

## **APPENDICES**

| <b>SECTION B</b>     |   | <b>pg</b> |
|----------------------|---|-----------|
| B1                   | Song lyrics   | 337       |
| B2                   | Bedroom Business DVD  | 338       |
| B3                   | Student demographics  | 339       |
| B4                   | Questionnaire   | 341       |
| B5                   | Normality and homogeneity of variance statistics<br>(untransformed variables)                       | 367       |
| B6                   | Normality and homogeneity of variance statistics<br>(transformed variables)                         | 369       |
| B7                   | Normality and homogeneity of variance statistics<br>(untransformed variables, steady partner items) | 371       |
| B8                   | Normality and homogeneity of variance statistics<br>(transformed variables, steady partner items)   | 373       |
| B9                   | Condom skills training intervention   | 375       |
| <br><b>SECTION C</b> |   |           |
| C1                   | Consultancy Timetable   | 379       |
| C2                   | Consultancy Contract  | 383       |
| C3                   | Working party meeting minutes   | 387       |
| C4                   | Consultancy review meeting  | 391       |
| C5                   | Invitation from Department of Health  | 392       |
| C6                   | Programme launch  | 394       |
| C7                   | Respondents training feedback forms   | 395       |
| C8                   | Final evaluation report   | 397       |
| C9                   | Course Aims and Learning Objectives   | 407       |
| C10                  | Needs Assessment  | 409       |
| C11                  | Assessment Instruments  | 411       |
| C12                  | Teaching Plan   | 413       |
| C13                  | Small Scale Evaluation & Reflective Report  | 415       |
| C14                  | Reflective commentary of video footage  | 419       |
| C15                  | Observer's Report   | 421       |
| C16                  | Needs Assessment  | 423       |
| C17                  | Teaching Plan   | 424       |
| C18                  | Observer's Report   | 425       |
| C19                  | Participant's Feedback  | 427       |
| C20                  | Intervention protocol   | 428       |
| C21                  | Feedback from group members   | 440       |
| C22                  | Service Level Agreement   | 445       |
| C23                  | Stop smoking monitoring form  | 449       |
| C24                  | Treatment protocol  | 451       |
| <br><b>SECTION D</b> |   |           |
| D1                   | Trial eligibility form  | 452       |
| D2                   | Characteristics of excluded studies   | 453       |



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**Declaration**

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# **SECTION A: PREFACE**



## **SECTION A: PREFACE**

Whilst completing this doctorate, I held three different positions within the NHS, working in smoking cessation and health promotion. I worked with a number of different professionals such as practice nurses and pharmacists, and others outside healthcare such as youth workers and teachers. I acquired experience of designing and delivering interventions, working directly with clients, both individually and in groups. Towards the latter part of my training, I gained experience at a more strategic level, focusing on service development and having responsibility for a number of Government programmes at a local level, such as the Teenage Pregnancy Strategy (Social Exclusion Unit, 1999). The work presented in the portfolio reflects this diversity, with the competencies detailing work carried out in the areas of smoking cessation, young people's sexual health and obesity.

Predominantly, my applied practice has been within healthcare settings, although this has expanded to beyond healthcare systems, for example, I currently work with schools. Health psychology and health promotion complement one another, for example, my research evaluated a health promotion initiative in schools within a health psychology theoretical framework, enabling me to unite my skills and knowledge of academic health psychology with my experience of working in an applied setting. Health Psychologists have noted there will be a demand for this type of applied practice, "With increasing appreciation of the economic and social benefits achievable through evidence-based prevention, demand is growing for psychologists to be involved in the design, co-ordination and evaluation of health promotion programmes" (Michie, 2004 p. 384).

## **SECTION B: RESEARCH**

There has been a dramatic increase in sexually transmitted infections (STIs), including human immunodeficiency virus (HIV), in the UK since the mid 1990s. The prevalence of STIs is particularly great in young people, who are disproportionately affected by poor sexual health. Young people represent almost 12% of the total UK population but account for more than half of all STI diagnoses (Health Protection Agency, 2007). The UK also continues to have one of the highest teenage pregnancy rates in Western Europe (Department for Education and Skills, 2006). To address this, numerous sexual health initiatives have been developed with the intention of decreasing the sexual risk behaviour of young people.

The research for this doctorate comprises an experimental evaluation of a sexual health promotion DVD, entitled "Bedroom Business". Health promotion is rarely subject to rigorous evaluation and this study aimed to address this, using a robust methodology. Bedroom Business is a 27 minute documentary featuring young people and health professionals discussing sexual health. The documentary also tells the story of five local young people, who write and produce a song delivering a safer sex message.

The study was carried out with students aged 16-18 in four inner London Secondary Schools. Schools were randomised to either a no intervention control or intervention condition, where participants viewed the DVD and participated in a group discussion.

Bedroom Business was evaluated in terms of its capacity to enhance 13 cognitive antecedents of condom use (for example, intention, attitudes, self-efficacy and perceived susceptibility to STIs). Participants in each condition completed identical measures at baseline and four week follow-up. After viewing the DVD, intervention participants were also asked to write down any comments they had about the DVD.

The quantitative data showed there were no differences between the two groups on any of the cognitive antecedents of condom use at four week follow-up. The DVD itself was very popular, with nearly all the students responding that they would recommend watching it to other young people. Qualitative data provided a useful insight, illuminating how the DVD was perceived by students, many of whom found it appealing because it featured other young people.

The implications of this study are discussed in the wider context of research into sexual health interventions for young people. Reviews of interventions to reduce sexual risk behaviour in adolescents have shown interventions are effective in changing behaviour such as condom use (Jemmott & Jemmott, 2000; Johnson, Carey, Marsh *et al.* , 2003; Kirby, Laris, & Rolleri, 2007; Mullen, Ramirez, Strouse *et al.* , 2002; Pedlow & Carey, 2003; Robin, Dittus, Whitaker *et al.* , 2004). However two recent large scale randomised cluster trials of sex and relationship education (SRE) in the UK, one of which was based on a 20 session intervention based on evidence based theoretical models and with the input of health psychologists, had limited effects. Both studies were found to have no effect in terms of the number of conceptions and terminations at long term follow-up (Henderson, Wight, Raab *et al.* , 2007; Stephenson, Strange, Allen *et al.* , 2008).

This being the case, the limitations of SRE are discussed in terms of the wider context of the overarching influences on sexual health, such as socio-economic and cultural factors. Interventions with a wider scope are emerging as promising approaches to reducing sexual risk behaviour, for example those that are more “generally targeted toward increasing youth resiliency and competencies” (Robin *et al.*, 2004 p.18). It is concluded that interventions that are greater in scope and duration, holistic in nature and which aim to change future life opportunities for young people may serve to be the most effective.

## **SECTION C: PROFESSIONAL PRACTICE**

### **Consultancy**

The case study describes consultancy undertaken to develop and implement a young people friendly accreditation system for health services in line with the, “You’re Welcome” Quality Criteria: Making Health Services Young People Friendly” (Department of Health, 2007). Young people often report that they find health services, including general practice, difficult to access (Coleman, 2001) and “You’re Welcome” aims to address this.

Drawing upon Schein’s (1998; 1999) model of Process Consultation, I established and co-ordinated a multi-agency working party, oversaw the development of a set of young people friendly criteria based on “You’re Welcome” and supported services to achieve accreditation. As part of this support, I delivered a training programme to receptionists at a sexual health clinic and GP practice. Following the training, participants reported feeling more confident in working with young people, including dealing with difficult situations, knowing about the law regarding sex and young people and confidentiality and consent. Participants commented that they enjoyed the style of the training (which involved group exercises and discussions) and the interaction the training encouraged.

Due to the work achieved for the consultancy, Westminster was invited to participate in a Department of Health pilot of “You’re Welcome”, for which I was local lead. Westminster’s selection as a pilot site is in itself is an important marker for evaluating the outcome of the consultancy. The consultancy was successfully disseminated, for example, I led a workshop at the launch of “You’re Welcome” which included colleagues from a number of different services and organisations across London.

## **Teaching and Training**

I developed and delivered over 50 teaching and training sessions during the period of my doctorate, mainly in the areas of smoking cessation and sexual health. I delivered this to a wide variety of learners including psychology undergraduates, postgraduate health psychology students, health professionals (for example practice nurses, midwives, pharmacists), young people, youth workers and teachers.

One case study describes a workshop I led for community nurses undertaking a national certificate of continuing professional development (CPD) in Personal, Social and Health Education. Participants are required to submit a portfolio which is competency based, and demonstrates an ability to reflect on their practice and show awareness of their personal values. The workshop utilised a combination of both didactic (PowerPoint presentation) and experiential (small group work and a personal values exercise) training methods. Feedback showed all participants increased their self-reported confidence for both understanding of personal values and reflection on their practice.

The other case study describes two lectures in smoking cessation for MSc Health Psychology students at University College London and City University. Teaching methods included a PowerPoint presentation, role play to illustrate interacting with a client and case study. Delivering these lectures provided an opportunity to demonstrate to students applied practice in health psychology. The feedback from students was very positive. Students particularly enjoyed the practical aspects of the lecture and diversity of teaching methods.

## **Optional Competencies**

My two optional competencies focused on the area of smoking cessation. Smoking remains the largest preventable cause of premature death and disability in the UK (Raw, McNeill, & West, 1998).

## **Implementing interventions to change health related behaviour**

The case study describes implementing a seven week group intervention to assist clients stop smoking. I applied group facilitation skills, knowledge of addiction, pharmacotherapy to assist with quitting, motivational techniques and cognitive, behavioural and situational strategies to aid behaviour change.

### **Direct the implementation of interventions**

The rationale of this intervention was to equip primary care professionals with the necessary skills and knowledge to conduct Level 2 stop smoking interventions. Level 2 is an individual intervention involving five sessions.

The aim of the intervention was to increase provision and activity of Level 2 advisors and provide them with the support necessary to deliver effective interventions. My role included training advisors by delivering a Level 2 one day training course and providing support in terms of advice (behavioural and technical), encouragement and provision of resources. My role also included monitoring and evaluating performance and providing feedback to advisors. I was able to increase the number of Level 2 advisors, creating more opportunity for clients to access stop smoking support. This case study also provides a reflection of the challenges of implementing and directing an intervention in primary care.

### **SECTION D: SYSTEMATIC REVIEW**

A systematic review was carried out to investigate psychological interventions aimed at helping people maintain weight loss. Trials were included if they were: randomised controlled trials of a psychological maintenance intervention versus a comparison intervention; measured weight change; had a minimum follow-up of 12 months and examined overweight or obese participants who had been on a weight reduction programme.

Six studies were included. Two studies found a positive effect on maintenance of weight loss. Interventions tended to utilise behavioural weight reduction strategies, but some also included group problem-solving and peer support programmes. The findings of the review suggested a promising approach is therapist led group problem-solving therapy. However, due to the small number of studies identified, it is impossible to draw firm conclusions. Future research is required that addresses the methodological limitations of current research to include larger and more diverse samples and longer term follow up.



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## **SECTION B: RESEARCH**

Can a sexual health DVD change the cognitive antecedents of condom use in school pupils? An experimental evaluation of 'Bedroom Business'



## **ABSTRACT**

The UK has one of the highest teenage pregnancy rates in Western Europe and young people are disproportionately affected by high rates of sexually transmitted infections. An experimental evaluation of a sexual health promotion DVD entitled, "Bedroom Business," was undertaken to assess its capacity to change the cognitive antecedents of condom use. Bedroom Business is a 27 minute documentary featuring young people and health professionals discussing sexual health. The DVD also tells the story of five local young people who write and produce a song which focuses on the risks of unsafe sex and underlines the importance of using condoms. Schools were randomised to either no intervention (control) or presentation of the DVD followed by group discussion (intervention). Participants were 147 students aged 16-18.

The DVD was evaluated in terms of its capacity to change 13 cognitive antecedents of condom use through a self-report questionnaire. Participants completed the questionnaire at baseline and at four week follow-up. Analysis of covariance, with baseline scores as covariates, showed there were no differences between the conditions on any of the variables. The DVD itself was very popular, with nearly all the students responding that they would recommend it to other young people. Qualitative feedback revealed many young people found it appealing because it featured other young people.

The implications of the study are discussed in the wider context of research into sexual health interventions. It is suggested interventions that are greater in scope and duration, holistic in nature and which aim to change future life opportunities for young people may serve to be the most effective.



## **1. INTRODUCTION**

### **CONTENTS**

|      |   |    |
|------|---|----|
| 1.1  | The sexual health of young people   | 25 |
| 1.2  | Reviews of interventions designed to reduce sexual risk behaviour in young people     | 27 |
| 1.3  | Sex and relationship education (SRE)  | 35 |
| 1.4  | The use of music in promoting safer sex   | 38 |
| 1.5  | The use of video in promoting safer sex   | 40 |
| 1.6  | The use of video within a school setting  | 42 |
| 1.7  | The use of group discussion in video interventions                                    | 43 |
| 1.8  | The Bedroom Business DVD  | 44 |
| 1.9  | The Theory of Planned Behaviour (TPB)   | 45 |
| 1.10 | The TPB and condom use  | 48 |
| 1.11 | Identifying the cognitive antecedents of condom use                                   | 48 |
| 1.12 | Actual condom use   | 51 |
| 1.13 | The effect of relationship status on condom use: specifying type of sexual partner    | 53 |
| 1.14 | Identifying behaviour change techniques within interventions                          | 54 |
| 1.15 | Identifying behaviour change techniques in the Bedroom Business DVD                   | 57 |
| 1.16 | Themes identified in the Bedroom Business DVD   | 58 |
| 1.17 | The most salient message of the DVD: increasing perceptions of susceptibility to STIs | 60 |
| 1.18 | Research Aim  | 61 |
| 1.19 | Hypothesis  | 62 |





## **1. INTRODUCTION**

### **1.1 The sexual health of young people**

#### **Sexually transmitted infections**

Data reveals that there has been a dramatic increase in sexually transmitted infections (STIs), including human immunodeficiency virus (HIV), in the UK since the mid 1990s. Diagnoses of chlamydia have increased by over 300% (from 32,288 cases in 1995 to 112,473 in 2006), cases of gonorrhoea by almost 200% (from 10,580 cases in 1995 to 19,007 in 2006) and HIV has increased more than threefold, from 2500 cases in 1995 to 7,800 in 2006 (Health Protection Agency, 2007). These increases are particularly great in young people. Young people (defined as those aged 16-24), represent almost 12% of the total UK population but account for more than half of all STI diagnoses (Health Protection Agency, 2007).

The most common STI in young people is chlamydia. In 2006, young men accounted for 56% (31,529/56,008) of all chlamydia cases in men, and young women accounted for 74% (42,695/57,577) of all diagnoses in women. Due to the stark increases in chlamydia, in 2003 the National Chlamydia Screening Programme in England was established with the objective of controlling chlamydia through the early detection and treatment of asymptomatic infection. In 2007, the government introduced targets for strategic health authorities to achieve an annual chlamydia screening coverage of 15% of 15-24 year olds.

Young women are also disproportionately affected by gonorrhoea, accounting for 70% of all diagnoses in women (3,749/5,380) and warts, accounting for 64% of all diagnoses (25,329/39,300). Young men are also disproportionately affected by these infections but to a lesser extent, with men aged 16-24 constituting 39% (5,365/13,627) of all gonorrhoea diagnoses in men and 46% (20,562/44,445) of all diagnoses of warts (Health Protection Agency, 2007).

The health implications of STIs are serious, causing considerable reproductive morbidity and poor health outcomes, including pelvic inflammatory disease, infertility, ectopic pregnancy, cervical cancer, neonatal disorders and even death (Holmes, Sparling, & Mardh, 1999).

#### **Teenage pregnancy**

In addition to the high numbers of STIs in young people, there is also concern about the number of women who become pregnant during their teenage years. Research shows over a quarter of young people in Britain report having had sex

before the age of 16 (Wellings, Nanchahal, Macdowall *et al.*, 2001). In response to statistics showing that the UK has the highest rate of teenage pregnancy in Western Europe, the Government produced the first Teenage Pregnancy Strategy (Social Exclusion Unit, 1999). This set a target of halving the under-18 conception rate by 2010 and establishing a firm downward trend in the under-16 rate.

The latest available data from the Office for National Statistics, published February 2009, show teenage pregnancy rates are declining, with a decline of 10.7% in the under-18 conception rate and a fall of 6.4% in the under-16s since 1998, the baseline year of the strategy. However the UK still has one of the highest teenage pregnancy rates in Western Europe and the cost to the NHS is estimated to be £63 million a year (Department for Education and Skills, 2006).

Teenage pregnancy is strongly associated with the most deprived and socially excluded young people. Longitudinal studies show that children born to teenagers are more likely to experience a range of negative outcomes. The infant mortality rate is 60% higher than for babies born to older mothers and children have a 63% increased risk of being born into poverty compared to babies born to mothers in their twenties, and are more likely to have accidents and behavioural problems (Department for Education and Skills, 2006).

Teenage pregnancy is a complex issue, affected by a wide range of personal, social, economic and environmental factors. Research has identified key risk factors which are known to increase the likelihood of teenage pregnancy. These can be broadly grouped into:

- 1) *risky behaviours* (early onset of sexual activity, poor contraceptive use, mental health/conduct disorder/involvement in crime, alcohol and substance misuse);
- 2) *education-related factors* (low educational attainment, disengagement from school, leaving school at 16 with no qualifications) and;
- 3) *family and social circumstances* (living in care, daughter of a teenage mother, ethnicity and parental aspirations) (Department for Education and Skills, 2006).

Consideration of these risk factors demonstrates the importance of early intervention for young people.

### **Condom use**

The condom offers an efficient method of contraception and is the superior method of protection against STIs. Both laboratory studies of condom permeability and epidemiological field studies of disease incidence, among

those who do and those who do not use condoms, have documented that condoms are effective against a wide variety of STIs (Solomon & Dejong, 1989), including HIV (Weller & Davis-Beaty, 2007).

A recently published study explored the pattern of condom use from 1990 to 2000, using data from two probability surveys of the British general population, the 1990 and 2000 National Surveys of Sexual Attitudes and Lifestyles (Natsal) (Cassell, Mercer, Imrie *et al.*, 2006). The Natsal surveys are stratified probability sample surveys of the general population resident in Britain aged 16-59. Natsal 1990 and Natsal 2000 achieved similar response rates; 63.3% and 65.4% respectively. This study analysed the results of those aged 16-44 (n = 13,765 in 1990, n = 11,161 in 2000).

Condom use increased in all age groups, but was most striking in younger groups. Condom use in the past year among sexually active 16-24 year old men increased from 61.0% in 1990 to 82.1% in 2000, and from 42.0% to 63.2% among women of the same age, with smaller increases among older age groups.

However, there was also a high level of *inconsistent* condom use, explored in the context of the past four weeks. Among individuals reporting at least two partners in the previous four week period, approximately two thirds reported inconsistent or no condom use (63.1% of men and 68.5% of women). Inconsistent condom use does not protect against HIV transmission (Ahmed, Lutalo, Wawer *et al.*, 2001; Orroth, Korenromp, White *et al.*, 2003). In their summary, while welcoming the increases in overall condom use, Cassell *et al.* (2006) highlight the importance of *consistent* condom use in young people, stating,

“The high rates of inconsistent condom use we have shown among those with multiple partners demonstrate a need to focus on the promotion of consistent and correct condom use among those with more partners. Such an approach must particularly focus on 16-24 year olds. This group experiences the highest rates of STIs, despite having the highest rate of condom use in the past year, and for last sex, in both genders (Brown, Sadler, Tomkins *et al.*, 2004), because of higher rates of new partner acquisition and concurrency than older age groups” (p.472).

## **1.2 Reviews of interventions designed to reduce sexual risk behaviour in young people**

As a result of the prevalence of STIs and teenage pregnancy, and evidence that sexual risk behaviours have increased, for example an increasingly younger age at first intercourse, increases in the number of partners and non-use of

contraception or condoms with new or casual partners (Wellings *et al.*, 2001), many interventions have been developed to try and improve safer sex behaviour amongst adolescents. The following section will present a synopsis of several reviews of interventions designed to reduce sexual risk behaviour in adolescents that have been published since 2000 (DiCenso, Guyatt, Willan *et al.*, 2002; Jemmott & Jemmott, 2000; Johnson, Carey, Marsh *et al.*, 2003; Kirby, Laris, & Rolleri, 2007; Mullen, Ramirez, Strouse *et al.*, 2002; Pedlow & Carey, 2003; Robin, Dittus, Whitaker *et al.*, 2004; Sales, Milhausen, & DiClemente, 2006).

**Jemmott and Jemmott (2000); “HIV risk reduction behavioural interventions with heterosexual adolescents”**

Jemmott and Jemmott (2000) reviewed 36 published behavioural intervention studies that were either randomised controlled trials (RCTs) or quasi-experimental designs with heterosexual adolescents. The most common outcomes were condom use and abstinence, assessed in the majority of studies. Assessed less often were number of sexual partners, frequency of unprotected sexual intercourse and condom acquisition. The interventions had the largest effect size for condom acquisition (Cohen's  $d = .38$ ) and condom use ( $d = 0.28$ ). The effects of the interventions on unprotected sexual intercourse ( $d = .19$ ), abstinence ( $d = 0.08$ ) and number of sexual partners ( $d = .10$ ) were much smaller.

The majority of studies also measured potential theoretical mediator variables. The most commonly assessed mediators were self-efficacy, knowledge about HIV prevention, beliefs about the consequences of condom use for sexual enjoyment and HIV preventive intentions. Jemmott and Jemmott (2000) found that the mean effect sizes were largest for HIV risk reduction knowledge and self-efficacy, and reported that the effects of the interventions on behavioural outcomes were larger when the interventions influenced conceptual mediators. Thus they concluded understanding the conceptual mediators or cognitive antecedents of safer sexual behaviour and targeting these in intervention materials is likely to result in more effective interventions.

**Mullen *et al.* (2002); “Meta-analysis of the effects of behavioural HIV prevention interventions on the sexual risk behaviour of sexually experienced adolescents in controlled studies in the United States”**

Mullen *et al.*, (2002) identified 16 studies between 1992 through to 1998 in a meta-analysis of the effects of interventions on sexually experienced

adolescents in the United States (US). Studies had to be either RCTs or quasi-experimental designs to be included. No pattern of content predominated, although content designed to increase adolescents' interpersonal skills and perceived risk for HIV/AIDS were most often clearly included in interventions. The summary odds ratio for the 13 studies measuring frequency of sex without condoms indicated that the intervention group was significantly less likely than the control or comparison group to have sex without condoms, but no difference was found for the number of partners.

**DiCenso et al. 2002; "Interventions to reduce unintended pregnancies among adolescents: systematic review of randomised controlled trials"**

DiCenso *et al.*, (2002) carried out a meta-analytic review of interventions designed to reduce unintended pregnancies among adolescents. The review was restricted to RCTs and included 26 trials described in 22 published and unpublished reports. Studies were included that evaluated pregnancy prevention programmes including sex education classes, school based clinics, family planning clinics, and community based programmes. All studies took place in developed countries. Studies had to include a measure of either delay in initiation of sexual intercourse, consistent use of birth control, or avoidance of unintended pregnancy. They excluded studies that measured only condom use because study participants may have been using other methods of birth control. The conclusion of the review was that primary prevention strategies do not delay sexual intercourse, improve use of contraceptives, or reduce pregnancies. However none of the school-based trials involved long-term follow-up and all relied on self-report measures.

**Johnson et al. (2003); "Interventions to reduce sexual risk for HIV in adolescents, 1985-2000"**

Johnson *et al.*, (2003) carried out a meta-analysis of interventions published from 1985 to 2000. Studies were included if they investigated any educational, psychosocial or behavioural intervention advocating sexual risk reduction for HIV prevention. Studies had to be RCTs or a quasi-experimental design with a rigorous control. Data from 44 studies and 56 interventions (N = 35, 282) were included.

Across the studies, reductions in sexual risk were greater for adolescents who received the HIV risk-reduction intervention compared with those in the comparison condition for 5 dimensions; condom use negotiation skills, condom

use skills, communications with sexual partners, condom use and sexual frequency.

Johnson *et al.* identified several factors related to the success of the interventions. Providing condoms was found to increase their use, but only when paired with a behavioural risk reduction intervention. More condom skills training resulted in more condom use. Even when the intervention group received relatively brief amounts of training (e.g., 15-20 minutes per session), the pattern was still observed and it remained regardless of the number of sessions in which participants received training, thus adolescents were able to benefit even from a single session. Johnson *et al.*, (2003) concluded,

“Condom use increased most among noninstitutionalised adolescents who were provided condoms and who received active training in the skills needed to use and negotiate condom use with a partner. Behavioural interventions that pursue these strategies do not increase the frequency of sexual behaviour, the number of sexual partners or the onset of sexual debut” (p.386).

**Pedlow and Carey (2003); “Developmentally appropriate sexual risk reduction interventions for adolescents: rationale, review of interventions and recommendations for research and practice”**

Pedlow and Carey (2003) conducted a narrative review and provided a methodological critique of RCTs of HIV risk reduction interventions that measured sexual risk behaviour outcomes with adolescents. Only RCTs published in peer-reviewed journals were eligible for inclusion. The multi-component interventions evaluated in the review included group discussions, counselling, communication and negotiation skills, leaflets on STIs, goal setting, social and self-rewards, education, HIV and youth speakers, problem-solving, self-management, cognitive skills training, modelling, role-play, skills training, story telling, videos and games. The interventions were conducted in schools, community sites and health care settings. The sample size of the included studies varied greatly, ranging from 34 to 3,869. The included studies reported on condom use, the incidence and treatment of STIs, the frequency of sex (protected and unprotected), the number of partners, delayed onset of sex, and abstinence.

Twenty-two RCTs (23 comparisons) were included in the review. Sixteen studies evaluated group interventions, with the number of sessions ranging from 1 to 12. Seven evaluated individual interventions, six with a single session and one with five sessions. Of the 23 interventions, 13 (57%) achieved a statistically significant reduction in risk. Fifteen studies (6 individual, 9 group) reported on

condom use, which improved in 53% of the studies (2 individual, 6 group). Seven studies (1 individual, 7 group) reported on the frequency of unprotected sex, which was reduced in 75% of the studies (6 group).

The authors concluded there was considerable evidence for the efficacy and effectiveness of HIV prevention programmes for adolescents. They argue more research is needed to compare individual and group approaches to HIV prevention, and to develop effective brief, single-session, individualised interventions. One limitation of this review is that only publications in peer-reviewed journals were considered, and thus it was restricted in scope, although this also meant that the quality of included articles was high.

**Robin et al. (2004); “Behavioural interventions to reduce incidence of HIV, STD, and pregnancy among adolescents: A decade in review”**

Robin *et al.*, (2004) reviewed behavioural interventions designed to reduce incidence of HIV, STIs, and pregnancy among adolescents. Articles were included if they were published in the 1990s, provided a theoretical basis for the programme, used quasi-experimental or experimental evaluation methods and were published in the US. A total of 24 articles met the inclusion criteria. This was a narrative review and did not utilise meta-analytic techniques.

Regarding use of theoretical models, most used a combination, “with social cognitive theories, the Health Belief Model, social learning theories and social influence theories applied most often” (p.17). Interventions varied widely in terms of duration. The shortest was one session (less than an hour) and the longest was 80 sessions (over 15 hours). Condom use was the behaviour most consistently reported to be affected the most, mirroring the finding of the earlier Jemmott and Jemmott (2000) and Mullen *et al.*, (2002) reviews.

The reviewers concluded “programs demonstrating positive effects included content that was specific to reducing sexual risk behaviour such as refusal of unwanted sex and condom-use skills. Programs with positive effects most commonly employed interactive and participatory educational strategies” (p.18). The reviewers also report that the duration of programmes may play a role in their effectiveness, as the three shortest programs in the review (all less than 3 hours) all produced null effects.

The review of Robin *et al.*, (2004) is useful in providing some indication of the factors which may contribute to the effectiveness of interventions. However it has several limitations including only searching published literature, leaving the



review open to publication bias. Further they only included literature published in the US, restricting the scope of the review.

**Sales, Milhausen and DiClemente (2006); “A decade in review: building on the experiences of adolescent STI/HIV interventions to optimise future prevention efforts”**

More recently, Sales *et al.*, (2006) carried out a qualitative systematic review larger than the reviews reported previously which were more limited in scope; although again this review was restricted to interventions conducted in the US (between 1994 and 2004). They identified 39 STI risk reduction interventions for adolescents conducted in four different settings (schools, clinics, community based and specialised locations, for example, juvenile detention centres).

The authors identified strengths and limitations across interventions which emerged regardless of setting. The first was the success of targeted interventions, that is, interventions with more success in decreasing high risk sexual behaviour were those that specifically tailored and delivered the intervention to a particular subgroup of adolescents (for example, African American females). Secondly, the use of theory in intervention development and implementation was associated with improved STI risk and behaviour outcomes. Social learning theory (SLT) (Bandura, 1977) and social cognitive theory (SCT) (Bandura, 1986) were the frameworks most consistently used in successful programmes. These programmes incorporated modelling, skills building, and attempted to increase self-efficacy with regard to safer sexual behaviour. Thirdly, interventions that went beyond STI education to include an emphasis on psychological correlates of risk were effective at decreasing STI risk behaviour. For example, interventions that included broader based content, such as problem solving, capacity building, social skill building and enhanced gender and ethnic pride, had the greatest impact on behaviour. The authors concluded, “Interventions more generally targeted toward increasing resiliency and competencies are emerging as promising approaches to reducing sexual risk behaviour” (p.18). This was also noted in the review of Robin *et al.*, (2004).

Sales *et al.*, (2006) were unable to draw firm conclusions about intervention duration, with some studies showing interventions with multiple sessions were some of the most effective (for example, Basen-Engquist, Coyle, Parcel *et al.*, 2001) and least effective (for example, Weeks, Levy, Gordon *et al.*, 1997). Sales *et al.*, (2006) reported that across venues, the risk behaviour most susceptible to change was condom use during vaginal sex. A few programmes showed

promising effects in terms of increasing abstinence or decreasing the number of sexual partners, however, these findings were markedly less common. The authors state, "Future intervention with adolescents, especially adolescents who are sexually active, should target behaviours, like condom use, that have been empirically demonstrated across a variety of adolescent subgroups and venues to be most amenable to change" (p.433).

**Kirby, Laris and Rolleri (2007); "Sex and HIV education programs: their impact on sexual behaviours of young people throughout the world"**

Kirby *et al.*, (2007) reviewed 83 studies that measured the impact of curriculum-based sex and HIV education programmes on sexual behaviour among young people under 25 years anywhere in the world, published since 1990. Studies had to have experimental or quasi-experimental designs and measure sexual behaviour outcome measures (such as initiation of sex, number of sexual partners, condom use) for at least 3 months. The studies also had to be a curriculum and group-based sex or HIV education programme, though not necessarily school based.

This review addressed some of the limitations of previous reviews, for example, several had been limited to literature published in the US (Mullen *et al.*, 2002; Robin *et al.*, 2004) and/or were rather limited in scope (for example, the Mullen *et al.*, (2002) review was restricted to sexually experienced adolescents and the Robin *et al.*, (2004) and Pedlow and Carey (2003) reviews only examined published literature).

The majority of studies (67%) took place in the US, with 22% in developing countries. Despite the fact programmes had been implemented throughout the world, studies had numerous characteristics in common. More than four fifths (83%) identified one or more theories, and often specified particular psychosocial mediating factors to be changed. SLT and SCT formed the basis for more than half (54%) of the interventions. Related theories identifying some of the same mediating factors were mentioned by substantial percentages of other studies, included the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975), Health Belief Model (HBM) (Janz & Becker, 1984), Theory of Planned Behaviour (TPB) (Ajzen & Madden, 1986) and the Information Motivation Behavioural Skills (IMB) model (Fisher & Fisher, 1992).

As identified in previous reviews, one source of great variation between programmes involved length of study. While the mean length was 12 hours, the actual lengths ranged from less than one hour to 48 hours.

The results of the review were encouraging, with two thirds (65%) of the programmes having positive effects on one or more sexual behaviours. For example, of the 54 studies measuring impact on condom use, almost half (48%) showed increased condom use; none found decreased condom use.

Kirby *et al.*, (2007) also investigated the impact of the programmes on mediating factors, such as attitude, knowledge, self-efficacy, intention and communication, for example more than two thirds of studies increased self-efficacy to use condoms. They found evidence was strong that programmes had positive effects on the mediating factors specified by psychosocial theories as being precursors of behaviour. They concluded therefore that it is changes in these mediating factors that are contributing to changes in sexual risk-taking behaviours.

### **Conclusion of reviews designed to reduce sexual risk behaviour in adolescents**

Taken together, the findings of the reviews show interventions *are* effective in reducing sexual risk behaviour, particularly in terms of increasing condom use. Regarding use of theoretical models, the SCT and SLT were most consistently applied (Jemmott & Jemmott, 2000; Kirby *et al.*, 2007; Sales *et al.*, 2006), however other theories were also commonly utilised, particularly the TRA, TPB, HBM, IMB, and often in combination (Robin *et al.*, 2004). Sales *et al.*, (2006) concluded that the use of theory in intervention development and implementation was associated with improved STI risk and behaviour outcomes, as have other authors (Fishbein, 2000; Kirby *et al.*, 2007). Jemmott and Jemmott (2000) identified that the effect of the interventions on behavioural outcomes were larger when the interventions influenced conceptual mediators (e.g., self-efficacy) as compared with when the interventions did not influence the conceptual mediators.

A common theme throughout the reviews was the need to improve research methodology in this area. There were significant limitations in the literature, with many studies providing limited explanations of programmes, problems with implementation, weak evaluation designs, measurement issues and statistical shortcomings, such as being statistically underpowered and not adjusting for multiple tests of significance. However a critical review of the literature shows there have also been many improvements, such as an increase in studies utilising experimental designs, and having longer term follow-ups. The majority of studies tend to rely on self-report outcome measures, although more recently

superior studies are increasingly measuring the impact on STI and/or pregnancy rates, available via clinic data.

Finally, it is noted the vast majority of the studies were derived from the US, thus research is highly warranted in other countries, including the UK.

### **1.3 Sex and relationship education (SRE)**

School sex education is commonly regarded as the most effective way of targeting young people who are at risk of unwanted pregnancies and STIs (Henderson, Wight, Raab *et al.*, 2007; UNAIDS, 1997). In recent years there have been two large scale studies of SRE conducted in the UK; Sexual Health and Relationships: Safe, Happy and Responsible (SHARE) and Randomised Intervention trial of PuPil-Led sex Education (RIPPLE). Both utilise rigorous methodology and include biological outcome measures and thus are worthy of particular consideration. Each are presented in turn.

#### **SHARE (Sexual Health and Relationships: Safe, Happy and Responsible)**

SHARE was conducted in Scotland and developed with a social science base, including health psychologists and health promotion specialists and utilising theoretical models, including the TPB. It ran for over five years and was funded to the level of over one million pounds (Ingham, 2005). The programme was relatively intensive, involving a five day training programme for teachers plus a 20 session pack: 10 sessions in the third year of secondary school (at ages 13-14) and 10 in the fourth year (at ages 14-15). It was intended to reduce unwanted pregnancies, reduce unsafe sex, and improve the quality of sexual relationships. The programme combines active learning (such as small group work and games), information leaflets on sexual health, and the development of skills to negotiate sexual encounters, handle condoms and access services, primarily through the use of interactive video but also role playing (Abraham, Wight, & Scott, 2002).

The study was a cluster randomised trial, with 13 intervention and 12 control schools (who received existing sex education). In the 12 control schools, sex education for third and fourth years varied from seven to 12 lessons in total, primarily devoted to provision of information and discussion. Only two control schools routinely demonstrated how to handle condoms, and none systematically developed negotiation skills for sexual encounters.

The research design permitted a rigorous evaluation. A careful randomisation of schools took into account socioeconomic characteristics of the school

populations, the proportion of pupils staying at school beyond the age of 16, school size, and local sexual health services, and other factors, including the quality of school sex education before the trial, a measure that included levels of teacher training. Nearly 6,000 children completed the two year follow-up questionnaire and were asked to report use of condoms and contraceptives at first and most recent sexual intercourse and unwanted pregnancies.

Interim results six months post intervention (average age 16 years 1 month), showed those in the intervention group had improved knowledge and less regret of first sexual intercourse with most recent partner (Wight, Raab, Henderson *et al.*, 2002). They also had higher scores on the belief that there are alternatives to sexual intercourse in romantic/sexual relationships, intentions to resist unwanted sexual activities and intentions to discuss condoms with sexual partners (Abraham, Henderson, & Der, 2004). However the intervention had no impact on reported sexual or contraceptive behaviour (Wight *et al.*, 2002) and no significant differences were found for the strongest cognitive correlates of consistent condom use including intention to always use a condom (Abraham *et al.*, 2004).

All girls were followed to the age of 20 (4.5 years after the intervention). Using NHS recorded conception and termination data, the authors found no significant differences between the groups in numbers of conceptions and terminations (Henderson *et al.*, 2007). The linkage to NHS data ensured no reporting bias and only minimal attrition from the original eligible sample.

### **RIPPLE (Randomised Intervention trial of PuPil-Led sex Education)**

A cluster randomised trial of pupil led sex education compared with conventional teacher led sex education (control) in England (RIPPLE study) was conducted over a similar time period to the SHARE study (Stephenson, Strange, Forrest *et al.*, 2004). Twenty-seven representative schools in central and southern England, with over 9,000 pupils took part. Peer educators were 16-17 year olds who worked for three, one hour classroom sessions with 13 and 14-year old pupils from the same schools. Peer-led (sex) education has been conceptualised as teaching or sharing of (sexual health) information, values and behaviours by members of similar age or status group (Sciacca, 1987). The sessions used participatory learning methods designed to improve the younger pupils' skills in sexual communication and condom use and their knowledge about pregnancy, STIs, contraception, and local sexual health services. The intervention was designed by an external team of health promotion practitioners

with experience in delivering peer-led sexual health programmes in schools and was not designed around any particular theoretical framework.

As with the SHARE study, a careful randomisation of schools took place, taking into account seven risk variables: socioeconomic status, ethnicity, educational attainment, continuing education post age 16, the quality and quantity of pre-existing school sex education, the attitude of the school toward health promotion information and links to external agencies and local family planning services.

Interim analysis showed by age 16, significantly fewer girls in the peer led group reported having intercourse compared with the conventional education group (35% v 41%), but proportions were similar for boys (33% v 31%). The proportions of pupils reporting unprotected first sexual intercourse did not differ for girls or boys (Stephenson *et al.*, 2004). The interim results were thus broadly positive, however they were all based on self reports and the effects on behaviour were modest.

The authors recently published the final follow-up to aged 20, with anonymised linkage of all girls in the trial to routine (statutory) reports of abortions and live births, to assess the effectiveness in reducing unintended teenage pregnancy (Stephenson, Strange, Allen *et al.*, 2008). By age 20, the proportion of girls having one or more abortions was the same (5%) in each arm of the trial. Other outcome data showed that the peer-led programme was more popular with pupils and the proportion of girls who had one or more live births was lower in the peer-led arm, although not significantly.

Parallels can be made to the SHARE study, as both trials did not have a “no sex education” control and thus conclusions cannot be drawn about the full impact of sex education, only about the effect of different approaches in schools. As with SHARE, it is a possibility that the potential for classroom teacher-delivered sex education to influence young people’s behaviour might already have been reached by current school provision.

### **Conclusion of school based SRE research**

The results of two robustly conducted large scale studies of SRE in the UK initially demonstrated some positive effects, including greater intention to resist unwanted sexual activities and to discuss condoms with sexual partners (Abraham *et al.*, 2004) and few self-reports of intercourse by girls at age 16 (Stephenson *et al.*, 2004). However findings were arguably limited. For instance there was no impact on reported sexual or contraceptive behaviour in the SHARE study (Wight *et al.*, 2002) or on number of conceptions and terminations

in both (Henderson *et al.*, 2007; Stephenson *et al.*, 2008). Arguably alternative approaches to traditional SRE warrant exploration. Two such approaches will be discussed further here. Firstly the use of music will be considered, and secondly the use of film.

#### **1.4 The use of music in promoting safer sex**

The use of music as a mechanism to promote the safer sex message has to date received little attention. The following quotation from Lemieux, Fisher & Pratto (2008) summarises why music presents a potentially effective mechanism in this area, particularly for young people:

“Among adolescents, music is a particularly powerful source of social communication of information, social influence and social norms (Crozier, 1997; Lewis, 1987). Music is also an integral component of persuasive communication because it is engaging, repeatable and participatory (Lull, 1987). Repetition often leads to increased familiarity with both the music and its message, which has the potential to increase its influence (for example, Russell, 1997). Evaluations of music are often shaped by the opinions of peers and the popularity of the performer, indicating that musical preference is socially constructed (Gregory, 1997) and adolescents are particularly aware of the social implications of music preferences (Williams, 2001). Because music is so centrally located in adolescents’ social identities and daily lives (Frith, 1996) it may effectively convey social information and influence, especially for females (Roe, 1987; Zillmann & Gan, 1997). ...Middle adolescents are at an age when conformity to peer group norms and peer group leaders is at its height (Gavin & Furman, 1989). As adolescents’ susceptibility to the normative influence of their peer group is well-documented, peer-based interventions that incorporate music may be an effective strategy for reaching this population and are worthy of exploration in research studies (p.350).”

Despite the theoretical reasoning outlined above for the potential of music, its use in sexual health interventions has been limited. Stephens, Braithwaite and Taylor (1998) concluded after a review of the literature, no preventive effort has presented a protocol for using music to reduce the risk of HIV/AIDS, although there is evidence of music being used to facilitate behaviour change in other areas including producing relaxation and decreasing aggressive behaviours (Snyder & Olson, 1996) and enhancing communication skills and group cohesion with substance abusers (James & Townsley, 1989). In a study of African American adolescents, Stephens *et al.*, (1998) used popular hip-hop music as a vehicle for discussion in HIV prevention counselling sessions. The discussions were facilitated about HIV risk and prevention based on themes in the music. The music was not developed for the intervention, but utilised existing records. An extensive review of the content and themes of approximately 179

songs created by 72 artists took place, whereby each song was analysed for information that could be used to reinforce HIV/AIDS risk reduction messages. Unfortunately no evaluation of this intervention was presented, with the authors suggesting evaluation of this approach is required.

Stephens *et al.*, (1998) argue the potential of using hip-hop music in health promotion is unlimited. They argue the use of hip-hop music in HIV prevention with groups of young people makes use of cultural relevant materials to address the educational and health needs of the target community and is grounded in an approach that serves to stimulate cooperative learning based discussion between peers and facilitators.

In a recent study, Lemieux *et al.*, (2008) evaluated a music-based HIV prevention intervention with adolescents in schools in the US informed by the IMB model. According to the IMB, HIV risk reduction information, motivation and behavioural skills are the fundamental determinants of HIV preventive behaviour.

The intervention was developed by musically talented opinion leaders, who wrote and recorded HIV prevention themed music. Six young people, defined as natural opinion leaders 'NOLs,' wrote, recorded and disseminated the intervention throughout their school. Recruitment of NOLs was facilitated by the nominations of peers and knowledgeable teachers. The criteria for the selection of NOLs consisted of being well respected, influential, able to credibly promote safer sex or abstinence and previous musical experience. The NOLs developed the song "Life is Too Short", a 5 minute Hip-Hop/R&B style song. The group also adopted the name "Students Working Against AIDS Together," referred to as SWATT. The lyrics addressed attitudes and social norms both for their peers who had never been sexually active and for whom abstinence remained an option, as well as for peers who had been sexually active and for whom the main emphasis of the message was consistent condom use. The chorus was repeated several times and contained the following lyrics: "Life is too short, to throw it all away, that's why we use a shield or we choose to wait". Approximately 1,000 compact discs (CDs) were bundled with other SWAAT-branded promotional materials including T-shirts, dog tags, lyric sheets and information cards. To disseminate the intervention the NOLs made in-class presentations to 10 health classes comprised of approximately 20 students each. Participants in the control condition received standard care health classes that did not receive the intervention. There was one treatment and two control schools.



Results showed at 3 month follow-up the intervention had positive effects on several aspects of HIV prevention motivation (which included attitudes toward HIV prevention, perceived social normative support for HIV prevention and perceived vulnerability to HIV), HIV prevention behavioural skills, condom use and HIV testing behaviours. This study thus demonstrates that music based HIV prevention interventions for adolescents have the potential to be effective.

### **1.5 The use of video in promoting safer sex**

A review of the use of video/DVD technology in sexual health interventions reveals a number of studies utilising this approach. Such interventions are attractive to health practitioners and policy makers because of their ease of implementation and potential cost-effectiveness. Effective media interventions would remove the constraints of the facilitator-led group setting, enabling easier implementation and reduced costs.

Videos as a method of sexual health education have been used for sometime. In one of the first studies, Solomon and DeJong (1989) used a soap-opera style videotape on inner-city STI patients in the US and found that those who viewed the tape had higher knowledge scores, more positive attitudes towards using condoms and were more likely to redeem condom coupons than randomly assigned control participants who did not view the tape. Heaton and Messeri (1993) carried out the first review of the use of video interventions investigating patient education and treatment adherence in an STI clinic setting. Eight intervention studies were selected for analysis and meta-analysis was applied to assess their impact. The review concluded that video education is effective for influencing knowledge and attitudes about STIs and condoms, with limited effects on treatment compliance. Treatment compliance was measured by return for test of cure, drug compliance, premature resumption of sexual activity, and condom coupon redemption rates.

Research published since this review builds on earlier findings, demonstrating considerable promise for video/DVD interventions. Studies have utilised a number of different participant populations and settings including universities, schools, STI clinics and other community and healthcare settings. Research shows a range of positive outcomes, including changes in attitude, condom use and the number of protected sexual acts. Furthermore, some studies have shown a positive effect in terms of biological outcomes, using clinical records to demonstrate a reduction in STI acquisition between video and control groups in the period following the intervention (Downs, Murray, de Bruin *et al.*, 2004;

O'Donnell, O'Donnell, San Doval *et al.*, 1998). Specifically the following positive outcomes have been reported:

- attitudes toward using condoms (O'Donnell, Doval, Duran *et al.*, 1995; Robinson, Uhl, Miner *et al.*, 2002);
- attitudes related to HIV/AIDS prevention (Torabi, Crowe, Rhine *et al.*, 2000);
- knowledge of STI/HIV transmission, symptoms of disease and correct condom use (O'Donnell *et al.*, 1995);
- perceived risk for contracting STIs/HIV (O'Donnell *et al.*, 1995);
- self-efficacy for condom use (O'Donnell *et al.*, 1995; Sanderson, 1999; Sanderson & Yopyk, 2007);
- intention to use condoms (Sanderson & Yopyk, 2007);
- likelihood of trying a female condom (Zimmers, Privette, Lowe *et al.*, 1999);
- intention to have an HIV test (Rothman, Kelly, Weinstein *et al.*, 1999);
- condom coupon redemption (O'Donnell *et al.*, 1995);
- self-reported condom use and the number of protected sexual acts (Kalichman, Cherry, & Browne, 1999);
- abstinence and condom failures (Downs *et al.*, 2004) and
- reduction in STI acquisition (Downs *et al.*, 2004; O'Donnell *et al.*, 1998).

Despite this encouraging evidence, the literature investigating the potential and limitations of videos and DVDs regarding sexual health outcomes is relatively scant. Significantly, the literature review undertaken revealed that none of the studies took place in the UK. Also noteworthy is studies were weak in their application of theoretical health behaviour models to develop the video/DVD or to evaluate their success, although there were instances where behaviour change theories were discussed. For example, O'Donnell *et al.*'s (1995) study of patients in a STI clinic, state that they drew on both the HBM and the TRA to develop the video.

A further weakness identified from an examination of the literature is the paucity of information provided about the content of the videos. The studies identified tended to provide very limited information, thus making it hard to isolate the nature of mechanisms present in the video that contributed to the positive outcomes and also making replication difficult. This problem is not unique to video interventions and echo's the sentiments of Michie and Abraham's (2004) critique of published interventions, which states evaluation reports rarely provide

adequate descriptions of intervention procedures, thus hampering the identification of intervention techniques associated with effectiveness.

### **1.6 The use of video within a school setting**

Considering the prevalence of teenage pregnancy and STIs in young people described previously, feasible, low-cost sexual health promotion interventions in schools are greatly needed. Video-based intervention is time and cost effective, and can be used repeatedly (Ferland, Ladouceur, & Vitaro, 2002; Torabi *et al.*, 2000). There are a number of reasons why visual media deserves exploration for its potential for learning and behaviour change within the school setting. A video combines more ways of providing information than other media (e.g. text), allows learning through both verbal and visual means (Wetzel, Radtke, & Stern, 1994), and may be better able to capture students' attention (Ferland *et al.*, 2002). Some research suggests that, when dealing with young people, simply conveying information is not enough to create positive effects (Donaldson, Graham, Piccinin *et al.*, 1997; Van der Pligt, 1998). A medium that can capture students' attention and interest is essential for an effective intervention. However there are very few published trials which utilise video interventions in a school setting as the primary and sole intervention method. Typically video education comprises one element of a multi-modal intervention.

Torabi *et al.*, (2000) used a quasi-experimental design to compare a video education intervention and control group in 20 public schools in Russia. Eleven schools participated as intervention schools and nine schools served as a control. A total of 1,124 students participated in the study, aged 13 to 15 years of age. Both intervention and control groups were administered a pre-test questionnaire, which contained items concerning knowledge, attitudes and risk taking behaviour related to HIV/AIDS. The control group received the usual academic programme excluding HIV/AIDS education. The intervention group viewed a two-hour tape. The tape had been developed in the US and,

“used lecture, illustration and question and answer techniques covering the nature of the disease, mode of transmission and prevention. The videotape was professionally dubbed and edited by bilingual Russian and American experts familiar with both cultures. The translated tape was examined by a group of bilingual educators with expertise in Russian culture for content and face validity and for eliminating culture bias” (p. 231).

Two weeks later both groups were given the battery of tests again. The results demonstrated that use of video education significantly improved students' scores on knowledge and attitudes related to HIV/AIDS prevention. However

there was no behavioural outcome measure and as this was the only follow-up, it is unknown as to whether the positive effects identified in the intervention group were present over a longer period.

### **1.7 The use of group discussion in video interventions**

There is limited evidence that group discussion can enhance the effectiveness of video interventions. O'Donnell *et al.*, (1998; 1995) investigated the use of video and group facilitation in participants attending STI clinics in New York. They found that in comparison with a control group, subjects who viewed videos were significantly more likely to redeem coupons for condoms. Moreover, participation in interactive sessions after video viewing augmented the positive effects of video viewing alone (27.6% redemption rate vs 36.9%, O'Donnell *et al.*, 1995), although there was no difference in the rates of STI infection between those who viewed the video only and those who viewed the video followed by interactive group discussion (O'Donnell *et al.*, 1998).

A difficulty with trying to isolate the impact of group discussion as opposed to video viewing alone is that several of the studies reviewed used facilitation as part of their multi-method intervention, and thus it is impossible to isolate the specific impact of the group discussion. For example, Robinson *et al.* (2002), in addition to showing a video tape, incorporated many methods of learning, including presentations by health professionals, peer panels, storytelling, exercises and discussion groups in a sexual health intervention in a community setting. The intervention was found to have a positive effect on attitudes towards condoms; however such a multi-method approach means that it is impossible to identify which components contributed to the effectiveness or otherwise of the intervention. Another example is Kalichman *et al.* (1999), who utilised an information-motivation video and incorporated an element of group discussion in the intervention. As with Robinson *et al.* (2002), the intervention was found to be effective, with an increase in self-reported condom use and the number of protected sexual acts, but again it is impossible to isolate the contribution of the discussion element.

Researchers have argued that group discussion should be an effective tool to facilitate learning. Group discussion is a method often used by teachers for learning and cognitive development (Ahern, Peck, & Laycock, 1992; Bartholomew, Parcel, Kok *et al.*, 2001). An advantage of group discussions is the interaction between students, giving adolescents the opportunity of expressing different points of view and to explore new concepts (Reubsaet,

Brug, Kitslaar *et al.*, 2004). Furthermore, better understanding and more thorough absorption of information can be achieved (Ahern *et al.*, 1992; Beckman, 1952). A video may be a useful education tool to trigger a classroom group discussion and thus encourage involvement among adolescents (O'Donnell *et al.*, 1995; Wetzel *et al.*, 1994).

In addition, it is argued that the use of film to aid group discussion is a pragmatic choice for teachers. Videotape and/or DVD players are nowadays available in all school settings and under the direct control of teachers. Teachers have the possibility to preview a tape, to introduce it at any time that is convenient for them, to stop it for discussion and to rewind it at any time (Wetzel *et al.*, 1994). O'Donnell *et al.* (1995) argue videos also provide a structure for initiating discussions about sensitive topics. Without a video trigger, more burden is placed on the facilitator to develop and guide the conversation.

### **1.8 The “Bedroom Business” DVD**

Westminster Primary Care Trust identified the need for an intervention to help address the high level of STIs and teenage pregnancy rates amongst young people. A consultancy company worked with a small group of rap artists in their late teens, who attended a youth club in Queen's Park, London.<sup>1</sup>

The young people were given information about sexual health and asked to write lyrics for a song to promote safer sex and/or highlight the risks involved in having unprotected sex. The young people were asked to ensure the song was not disrespectful to any particular group, but otherwise were given free reign to express themselves in their own words. The rap/hip-hop song was recorded at the youth club and a video shot at Café de Paris, a night club in London's West End. The song is entitled “1 in 3” and focuses on the hazards of unsafe sex, including teenage pregnancy and contracting an STI. It also reinforces condom use. For example, some of the lyrics are “Now let me teach you a lesson...about when them teenagers become pregnant...Now look at the aftermath, a baby, now no more jamming in ends, no more hanging with friends, so don't come on

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<sup>1</sup> Queen's Park is the most deprived ward in Westminster with figures from 2007 showing it has the highest Index of Multiple Deprivation score (50.75 compared to Westminster average of 25.91). The results of the 2001 Census indicate the ethnic population is diverse, with 48% of the population of the Queen's Park and Paddington locality from a non-White background. All of the Super Output Areas (SOAs) in Queens Park ward feature in the 20% most income deprived SOAs in the country. One SOA in the Queens Park ward has the highest proportion of children living in income-deprived families (100%) in the country (Westminster PCT, 2008).

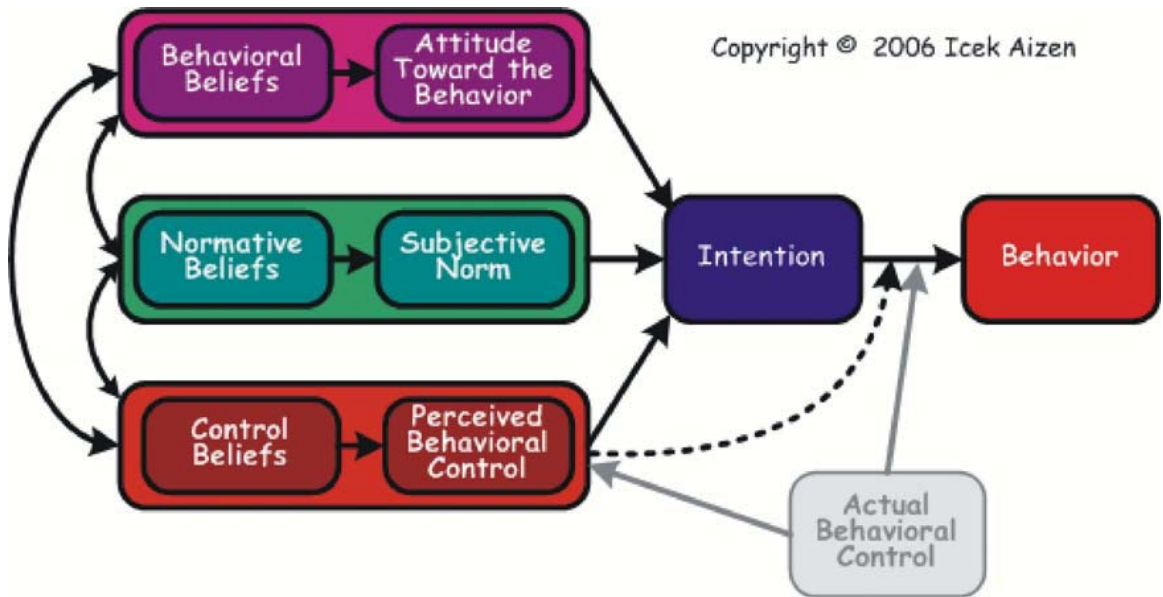
without a glove on". The chorus is repeated several times and contains the following lyrics, "Now I'm just the one in three with an STD [sexually transmitted disease] , they say what goes around comes right back again, why you gotta do this to me?" (see appendix B1 for the full song lyrics).

A short DVD documentary was produced. The film is presented by Cyko Manny, a young Black man who is one of the rap artists. The documentary follows Cyko as he takes the "1 in 3" song out on the streets of Westminster. He talks to a variety of young people and hears what they think about sex and protecting themselves. The documentary also tells the story of how the "1 in 3" song was developed, featuring the young people involved in producing it. The people featured in the documentary are diverse in terms of ethnicity and sexual orientation. For example, the presenter interviews a gay man, a man living with HIV and young people from a wide variety of different ethnic backgrounds. Cyko also talks to health professionals, who provide short bursts of factual information such as the statistics concerning the recent increases in rates of STIs amongst young people. The documentary is edited in a style to keep the attention of the viewer. All the people who appear in the documentary use their own words to give their opinions, although the documentary has been structured to ensure that it does not reinforce any misinformation that people might have around sex and sexual health. The DVD is very much told from a young person's perspective to inform their peers. The DVD ends by playing the '1 in 3' song which contains positive statements about using condoms and staying safe. The DVD lasts for 26 minutes and 30 seconds (a copy is in appendix B2).

### **1.9 The Theory of Planned Behaviour (TPB)**

Although the Bedroom Business campaign was not based on any particular psychological theory or model, this research aims to evaluate the effectiveness of this intervention using a theoretical model able to predict intentions to use condoms and condom use behaviour. The model selected is the TPB outlined in Figure B1.

**Figure B1 Theory of Planned Behaviour**



The TPB is the most widely applied model of cognitive antecedents of behaviour, and research consistently supports its utility in predicting behaviour (Ajzen, 1991, 2001; Armitage & Conner, 2001; Godin & Kok, 1996). For example, Armitage and Conner (2001) found that on average the theory accounts for 27% of the variance in measures of behaviour.

The TPB (Ajzen, 1991) is an extension of the TRA. The TRA proposes that behavioural intention (e.g., “I intend to use a condom the next time I have sexual intercourse”) is the strongest and most proximal antecedent of action. Intention “represents a person’s motivation in the sense of her or his conscious plan, decision or self-instruction to exert effort to perform the target behaviour” (Conner & Sparks, 2006 p. 171). Intention is thought to be determined by the person’s attitude towards the behaviour and by their subjective norm. Attitude refers to the person’s evaluation of the behaviour (e.g., “using a condom the next time I have sexual intercourse would be good/bad”). It has been noted that attitudes can be thought of as comprising both instrumental and affective components. Instrumental beliefs relate to the benefits and costs associated with a behaviour (e.g., harmful-beneficial, valuable-worthless) and affective beliefs are emotion laden judgements about the consequences of the behaviour (e.g., pleasant-unpleasant, enjoyable-unenjoyable). Subjective norm is based on the person’s beliefs about what significant others think s/he should do, i.e., people’s perceptions of social pressure to perform the behaviour (e.g., “people who are important to me think that I should use a condom the next time I have sexual intercourse”).

The TPB was developed to broaden the applicability of the TRA beyond purely volitional behaviours by incorporating explicit considerations of perceptions of control over performance of the behaviour as an additional predictor of behaviour (Ajzen, 1988; Ajzen, 1991, 2002). In the TPB, a person's beliefs about the extent to which performing the behaviour is up to the actor, termed perceived behavioural control (PBC), is thought to predict both intention and behaviour. PBC bolsters intention because we are not motivated to undertake tasks at which we expect to fail and PBC predicts behaviour directly when it reflects actual control over outcomes. PBC is closely related to Bandura's construct of self-efficacy (Ajzen, 1998; Bandura, 1977, 1986, 1992, 1998).

### **Applying the TPB in behaviour change interventions**

Despite the evidence for the utility of TPB, surprisingly the theory has only infrequently been used as a basis for interventions evaluated in terms of behaviour change (Hardeman, Johnston, Johnston *et al.*, 2002). In a systematic review of the application of the TPB to behaviour change interventions, Hardeman *et al.* (2002) found that the TPB was mainly used to measure process and outcome variables and predict intention and behaviour, and less commonly to develop the intervention.

Hardeman *et al.* (2002) identified 24 distinct interventions which explicitly applied the TPB to behaviour change interventions. Out of the 24 studies, only five had been conducted in the UK. Three studies (all US) had applied the TPB to condom use (Bowen, 1996; Jemmott, Jemmott, & Fong, 1998; Sanderson & Jemmott, 1996). Hardeman *et al.* (2002) found that when reported, half of the interventions were effective in changing intention and two-thirds in changing behaviour, although effect sizes were generally small. They found that effectiveness was unrelated to use of the theory to develop interventions, but cautioned that this is based on the small number of studies available. They concluded "it is difficult to assess the true effectiveness of using the TPB, as interventions were rarely designed on the basis of the theory, and often also other theories and models were used to develop the intervention" (p.148).

It is argued that the TPB could be more widely used to develop and evaluate interventions (Conner & Armitage, 1998; Hardeman *et al.*, 2002). Hardeman *et al.* (2002) concluded their review by calling for well-designed studies that utilise the TPB,

"The Theory of Planned Behaviour may have a valuable contribution to make to developing effective interventions aimed at behaviour change, especially



among individuals where motivation to act cannot be taken for granted. However current evidence is lacking. Well-designed studies that evaluate carefully developed interventions, specifically targeting TPB components and measuring the effect on cognitions as well as behaviour, are needed to provide evidence about the utility of the TPB in this area” (p.151).

Thus despite impressive correlational support for the TPB, it has rarely been the subject of experimental test.

### **1.10 The TPB and condom use**

Although evidence is scarce regarding the effectiveness of the TPB for the development of interventions, an increasing volume of research suggests that the TPB provides a good basis for understanding the cognitive antecedents of condom use. Sheeran, Abraham and Orbell (1999) conducted a meta-analysis comparing 44 previously investigated psychosocial correlates of condom use, drawing upon 121 empirical studies. Using weighted correlations as a measure of effect size and adopting Cohen’s (1992) guidelines to interpret effect sizes about 0.30 as substantive, their results supported the utility of the constructs specified by the TRA. Attitude ( $r = .32$ ), subjective norm ( $r = .26$ ) and intentions to use condoms ( $r = .43$ ) were highly correlated with condom use.

More recently, Albarracin, Johnson, Fishbein *et al.* (2001) conducted a meta-analysis of the TRA and TPB as models of condom use. The authors synthesized 96 data sets ( $N = 22,594$ ) containing associations between the models’ key variables. The review indicated that the TRA and TPB are highly successful predictors of condom use. Condom use was found to be related to intentions ( $r = .45$ ) and intentions were based on attitudes ( $r = .58$ ) and subjective norms ( $r = .39$ ). PBC was related to condom use intentions ( $r = .45$ ) and condom use ( $r = .25$ ), although in contrast to the theory, it did not contribute significantly to condom use. The impact of PBC on behaviour was very small after controlling for the influence of intention ( $\beta = 0.05$ ).

### **1.11 Identifying the cognitive antecedents of condom use**

In addition to the variables specified by the TPB, a number of other cognitive antecedents have been identified as important in condom use. These variables are presented below and, alongside the variables in the TPB, will be used to evaluate Bedroom Business. The majority of the variables were identified by Sheeran *et al.*’s (1999) meta-analysis having a medium to large correlation with condom use. Sheeran *et al.*, concluded from their meta-analysis that their results “provide empirical support of conceptualising condom use in terms of

[...] an extended Theory of Reasoned Action” (p.126) and argued that these correlates specify important targets for safer sex promotion.

### **Descriptive Norm**

There is some conceptual debate about different types of normative influences on behaviour. Ravis and Sheeran (2003) explain normative influences have been considered to be made up of a) *injunctive* norms (what significant others think the person ought to do, i.e., social pressure) and b) *descriptive* norms (perceptions of significant others' own attitudes and behaviours). With descriptive norms, the opinions and actions of significant others, provide information that people may use in deciding what to do themselves. Cialdini, Kallgren and Reno *et al.* (1991) define the normative beliefs used in the TPB as injunctive social norms because they are concerned with perceived social pressure, that is, the person's potential to gain approval or suffer sanctions from significant others for engaging in a particular behaviour. The relative predictive power of these normative components is an issue of some debate (Conner & Sparks, 2006).

In considering condom use behaviour, there is evidence to suggest that descriptive norms have more predictive power than subjective norms. In their meta-analysis, Sheeran *et al.* (1999) found descriptive norms had a medium to large correlation with condom use ( $r = .37$ ), which had a higher correlation than that of subjective norm ( $r = .26$ ). In addition, Abraham *et al.* (2004) found that descriptive norm was the strongest correlate of consistent condom use in an evaluation of a school sex education programme ( $r = .36$ ), and again had a stronger correlation than subjective norm ( $r = .18$ ). Thus the evaluation of Bedroom Business will incorporate a measure of descriptive norm, in addition to a measure of subjective norm.

### **Condom use self-efficacy**

Self-efficacy is “the belief in one's capabilities to organise and execute the courses of action required to manage prospective situations” (Bandura, 1995 p.2). In Sheeran *et al.*'s meta-analysis condom use self-efficacy had a medium correlation with condom use ( $r = .25$ ). Self-efficacy has been included in many models of the cognitive antecedents of condom use (for example, the IMB) and targeted in interventions promoting safer sexual behaviour (for example, Kalichman, Carey, & Johnson, 1996; Kalichman & Hospers, 1997).

### **Condom use preparatory action**

It makes intuitive sense that condom use must be preceded by acquisition of condoms that are then available before intercourse and that not having a condom available prevents actual condom use. Crosby, Sanders, Yarber *et al.* (2002) reported that over 40% of heterosexual college men reported wanting to use a condom but not having one available. Sheeran *et al.*'s (1999) meta-analysis identified that the preparatory actions of carrying condoms ( $r = .31$ ) and ensuring condoms were available ( $r = .41$ ) had medium to large correlations with condom use. Consequently, the cognitive antecedents of these preparatory actions (Bagozzi, 1992; Sheeran *et al.*, 1999) may also be cognitive antecedents of condom use. In particular, following the logic of the TPB, intention to undertake these preparatory actions may usefully characterise those that are more likely to use condoms. Following Abraham *et al.* (2004), this study will measure intentions to acquire condoms, carry condoms, suggest and discuss using condoms.

### **Condom communication self-efficacy**

In their meta-analysis, Sheeran *et al.* (1999) identified that communication with sexual partners about condoms had the highest correlation with condom use ( $r = .46$ ). Growing research on communication about condoms supports the importance of this behaviour in determining whether or not condoms are used. For example, in a UK study of adolescents, Henderson, Wight, Raab *et al.*, (2002) found that talking about condoms with a partner increased the likelihood of using a condom by nearly four times. Therefore the present study will include a measure of self-efficacy concerning communicating about condoms with a partner.

### **Condom use skill**

Ability to correctly use a condom is essential for ensuring the efficacy of condom use. Although these behavioural skills were not directly addressed in the present intervention, it is hypothesised that the intervention could result in the acquisition of behavioural skills among participants because it highlights the importance of using condoms to prevent unwanted pregnancy and STI transmission. Increasing participants' condom use skill in safer sex interventions has been found to be an effective mechanism for increasing condom use, identified by numerous studies (for example, Jemmott, Jemmott, Braverman *et al.*, 2005; Johnson *et al.*, 2003).

### **Knowledge of correct condom use, STIs and pregnancy**

Although knowledge has been found to have a small correlation with condom use (for instance, Sheeran *et al.*, found a correlation of .06 for knowledge of HIV/AIDS with condom use), it is considered that basic knowledge of the risks of getting an infection and/or pregnancy following unprotected sexual intercourse is a prerequisite to condom-use motivation (Abraham *et al.*, 2004). Therefore this study will investigate students' knowledge of condom use, STIs and pregnancy prevention.

#### **1.12 Actual condom use**

Behaviour change remains the most widely used outcome measure for HIV/STI intervention studies because, unlike direct measures (i.e., biological markers of STI infection), reductions in reported STI/HIV risk behaviours are amenable to study in the short term with realistic sample sizes and at reasonable costs (Pinkerton, Holtgrave, Willingham *et al.*, 1998). However it is beyond the scope of this project to achieve the sample size necessary to detect any effect of the intervention on behaviour, i.e., self-reported condom use, as it is expected only a minority of the sample will be sexually active and thus there will be an insufficient number of participants to be able to assess any potential effect of the intervention.

Whilst this is a limitation, this follows similar school based studies, such as Krahe, Abraham and Scheinberger-Olwig (2005). Krahe *et al.* (2005) undertook an experimental evaluation of an evidence based safer sex promotion leaflet to assess its capacity to change antecedent cognitions of condom use as identified in Sheeran *et al.*'s (1999) meta-analysis. A pre-post-test experimental study including three conditions was conducted in schools with students aged 15-16 years of age. The three conditions were, 1) presentation of an evidence based health promotion leaflet, 2) presentation of the leaflet plus incentive for systematic processing and 3) no leaflet control. Following baseline assessments, leaflet-induced change was measured immediately following the intervention and at a follow up four weeks post-intervention.

Krahe *et al.* outlined the following points as a rationale for focussing on the cognitive antecedents of condom use behaviour as opposed to behaviour,

“Firstly, as shown by several meta-analyses, cognitive variables such as attitudes, normative beliefs, self-efficacy beliefs, and intentions have been shown to be important antecedents of behaviour and should, therefore, be targeted by interventions. Secondly, it seems unrealistic to expect that a single session intervention lasting less than 1 hour would have a lasting

impact on behaviour unless it changed cognitive antecedents of the behaviour. Thirdly, focusing on cognitive variables permits the inclusion of adolescents who have not yet experienced their first sexual intercourse. These adolescents are an important target group since pro-condom cognitions should ideally be established before the initiation of sexual activity. Finally, previous studies using samples in which only a small proportion of respondents were sexually active were unable to detect intervention effects at the behavioural level (Siegel, DiClemente, Durbin *et al.*, 1995, p.217)."

Notwithstanding the arguments raised above, a measure of condom use behaviour was considered worthy of inclusion to ascertain the prevalence of actual condom use within the sample who are sexually active.

### **Condom use errors**

Researchers recommend assessing condom use errors when measuring condom use (Fishbein & Pequegnat, 2000; Noar, Cole, & Carlyle, 2006). As Fishbein and Pequegnat (2000) state, consistent condom use is not necessarily correct condom use and incorrect condom use almost always equates to unprotected sex. Research has shown that many individuals from diverse populations from college students to STI clinic clients, do not use condoms correctly during sex, with problems ranging from putting on condoms incorrectly to only wearing the condom for part of the sex act (Crosby, Sanders, Yarber *et al.*, 2003; Crosby, DiClemente, Wingood *et al.*, 2005; Crosby *et al.*, 2002; Hatherall, Ingham, Stone *et al.*, 2007; Qu, Liu, Choi *et al.*, 2002; Warner, Clay-Warner, Boles *et al.*, 1998).

Crosby *et al.* (2002) surveyed 158 heterosexual college men in the US and found condom use errors were common: 43% put condoms on after starting sex, 15% took a condom off before sex was over, 40% did not leave a space at the tip, and just less than one third (30%) placed the condom upside down on the penis and had to flip it over. Breakage was the most common problem (29%) and 13% reported the condom slipped off during sex. In a later study including both female and male undergraduates, Crosby *et al.*, (2003) found similar condom use problems. For example, 38% reported that condoms were applied after sex had begun and nearly 14% indicated they removed condoms before sex was concluded. About 28% reported that condoms had either slipped off or broken. Few differences were observed in errors and problems between males and females.

In a recent survey of students aged 16-18 in English schools, Hatherall *et al.*, (2007), also identified problems with correct condom use. Of the 375 students who reported using a condom on the most recent occasion of sex, 6% had

applied the condom after penetration and 6% had continued penetration after condom removal. A sub-sample of young people also completed up to 10 diary entries over a 6 month period. Of the 74 diary respondents, 31% applied a condom late and 9% removed a condom early at least once over a 6 month period.

These findings are important because they suggest that merely assessing consistency of condom use may underestimate the level of STI and pregnancy risk. Also, policies and programmes aimed at improving sexual health by increasing condom use may not maximise their impact if the possibility of imperfect use is not also addressed (Hatherall *et al.*, 2007). Further, without adjusting for condom use errors, studies assessing the protective value of condoms for STI prevention may underestimate their effectiveness. Crosby *et al.* (2005) found that when they adjusted their measure of condom use to account for condom failures there was a significant relationship with condom use and biologically confirmed prevalence of STIs. The unadjusted measure however was not significantly associated with biologically confirmed STIs, thus demonstrating how important measures of condom errors are in studies evaluating condom effectiveness. Thus researchers have recommended assessing condom use errors in addition to condom use consistency (Crosby *et al.*, 2005; Fishbein & Pequegnat, 2000; Noar *et al.*, 2006).

### **1.13 The effect of relationship status on condom use: specifying type of sexual partner**

Scholars stress the importance of specifying partner type when asking about condom use, for example, making the distinction between casual and steady partners (see Noar *et al.*, 2006; Sheeran & Abraham, 1994). This recommendation is a result of research suggesting condom use varies depending on the nature of the relationship. In their meta-analysis, Sheeran *et al.* (1999) found condom use was twice as likely to be consistent with casual/new partners as opposed to regular partners. Macaluso, Demand, Artz *et al.* (2000) also reported that consistency of condom use is higher with new or casual partners than with regular partners. Consistent condom use decreased in partnerships that changed status from new to regular because as the relationship becomes more serious, partners tend to change their contraceptive method, typically relinquishing condoms for the contraceptive pill.

There is also evidence to suggest that interventions are less able to exert an effect on condom use on people who consider themselves to be in a steady

relationship. Sanderson and Jemmott (1996) found that an HIV risk-reduction intervention was less effective in creating behaviour change in terms of condom use for students who were in steady dating relationships than among those who were not.

On the basis that research shows condom use is more common with casual partners as opposed to steady partners and evidence suggesting interventions are less able to exert an effect on condom use with people who consider themselves to be in a steady relationship, a decision was taken to focus the current study predominantly on condom use with casual partners.

### **1.14 Identifying behaviour change techniques within interventions**

To summarise so far, the current study aims to evaluate the Bedroom Business DVD utilising the measures specified by the TPB and other previously identified cognitive predictors of condom use. In addition, it was considered important to identify the constructs as being targeted for change by the intervention by coding the techniques present in the DVD. Michie and Abraham (2004) point out that in order to understand why an intervention works, firstly the contents or elements that comprise the intervention must be explicitly identified.

Unfortunately evaluation reports rarely provide adequate descriptions of intervention procedures that allow replication. As Abraham and Michie (2008) state, “published evaluations of behaviour change interventions are variable and subjective in both language and format” (p.380). This is further complicated by the fact that precise description of methods is challenging because no standardised terminology for describing behaviour change techniques has existed. The absence of standardised definitions both limits fidelity of intervention replication and the build up of evidence of what works and why (Michie & Abraham, 2004). Abraham and Michie (2008) have argued that the development of “standardised descriptions of intervention content would facilitate the fidelity of intervention operationalization in replication studies and applications and promote the identification of intervention techniques associated with effectiveness and facilitate theory testing through meta-analyses” (p.380).

To address the lack of standardised definitions, Abraham and Michie (2008) developed a taxonomy of 26 definitions of behaviour change techniques used in interventions. There is an accompanying five page coding manual which includes coding instructions on how to identify these specific techniques in intervention descriptions. Thus, the taxonomy can be used to ascertain whether interventions refer to any, or all, of the 26 defined techniques. The 26 behaviour

change techniques reflect a variety of theoretical accounts of behaviour change. They were derived from reviewing existing lists of behaviour change techniques used in health behaviour interventions (Conn, Valentine, & Cooper, 2002; Hardeman, Griffin, Johnston *et al.*, 2000; Prochaska, Diclemente, & Norcross, 1992), and refining them into a set of theory-linked techniques that could be used to characterise intervention content across behavioural domains.

Abraham and Michie (2008), where possible, identify which of the theoretical models of behaviour change correspond with each behaviour change technique. For example, technique two is entitled 'provide information on consequences', technique three is entitled 'provide information about others' approval' and technique four is entitled 'prompt intention formation.' These techniques refer to persuasive communication targeting the cognitions of attitude, subjective norm and behavioural intention respectively as specified by the TRA and TPB. Theories that specify the same process of behaviour change (or mediating mechanisms) imply the same behaviour change techniques. Thus techniques two and four can also be derived from SCT and techniques two, three and four from the IMB model.

In addition to identifying the taxonomy of behaviour change techniques in interventions described above, a search was undertaken to establish whether any coding material existed specifically for sexual health video/DVD interventions. The search identified a coding table developed by Herek, Gonzalez-Rivera, Fead *et al.* (2001) used for categorising health promotion messages in HIV/AIDS educational videos. Herek *et al.* (2001) coded 74 videos for the presence or absence of messages identified by various theoretical models as relevant to HIV education and risk reduction, including the SCT, IMB, TPB, HBM, and the AIDS Risk Reduction Model (ARRM) (Catania, Kegeles, & Coates, 1990).

Herek *et al.* (2001) identified the following nine content areas:

1. *General Information* coding category was related to background information about HIV/AIDS (e.g., what AIDS is, how HIV attacks the immune system).
2. *Audience Vulnerability* coding categories related to information that (a) emphasizes the severity of AIDS and (b) encourages viewers to consider their own susceptibility to HIV infection.
3. *Transmission and Prevention* coding categories are related to information about (a) how is HIV transmitted, (b) how HIV is *not* transmitted (i.e., casual contact) and (c) the effectiveness of various



practices (e.g., condom use, cleaning needles) for preventing HIV transmission.

4. *Social Norms* coding categories include discussions and dramatizations conveying supportive social norms for avoiding unsafe sex.
5. *Interpersonal Aspects of Sexual Risk Reduction* coding categories describe information relevant to partner negotiation. They include (a) discussions and dramatisation of how to negotiate with a partner about safer sex, (b) discussions and dramatisations of how to decide jointly with a partner to avoid unsafe sex, (c) discussions and dramatisations of how to refuse unsafe sex when a partner initiates or proposes it, and (d) discussions and dramatisations of informing sexual partners about one's HIV status.
6. *Techniques of Sexual Risk Reduction* coding categories are all related to information about enacting behaviours that prevent the sexual transmission of HIV. They include (a) verbal explanations of how to use barriers such as condoms during sex, (b) demonstrations of how to use barriers, (c) discussions of sexual acts that carry no risk for HIV, such as mutual masturbation, (d) depictions of such acts, (e), discussions of abstinence or monogamy and (f) discussions of the possible effects of alcohol and recreational drugs on effective risk reduction.
7. *HIV Testing and Aftermath* describe video content that provide information about (a) HIV testing, (b) living with HIV or an AIDS diagnosis and (c) coping with fears about death and issue of loss.
8. *Stigma* coding categories describe information about (a) AIDS-related stigma and (b) attempts to counteract AIDS-related stigma.
9. *Surviving and Thriving* coding categories describe information about (a) healthy living and maintenance of positive feelings about oneself and one's sexuality and (b) community organising strategies and specific community-based organisations responding to AIDS.

Herek *et al.*'s coding frame presents a comprehensive content analysis of videos in the area of AIDS education and was thus a useful resource for coding the DVD in the current study. However it is important to note that there are some important differences between Herek *et al.*'s study and the current DVD. Herek *et al.*'s coding frame is specific to AIDS education and HIV prevention, as opposed to the DVD in the current study which is generic safer sex promotion targeted at young people (i.e., the promotion of condom use for prevention of

transmission of all STIs, not just HIV, and unwanted pregnancy). In addition, Herek's *et al.*'s coding frame is somewhat dated due to considerable advances in antiretroviral treatment for HIV since the 1990s, with HIV now being considered a chronic as opposed to a terminal illness in developed countries.<sup>2</sup> Thus not all the content areas identified in Herek *et al.*'s analysis are warranted here, in particular, themes seven, eight and nine are not appropriate in the current study.

### **1.15 Identifying behaviour change techniques in the Bedroom Business DVD**

Although the Bedroom Business DVD was not designed using evidence based theoretical concepts of behaviour change, the DVD was coded to see whether it contained messages which could be mapped onto existing definitions of behaviour change techniques. A decision was made to utilise a combination of deductive and inductive coding to examine the DVD. Deductive coding is drawn from existing theoretical ideas that the researcher brings to the data and inductive coding is drawn from the raw information itself (Joffe & Yardley, 2004). Inductive coding was firstly utilised; the raw material was coded into themes. Deductive coding was then employed; the themes identified by the inductive coding were explored to see if any of the content could be mapped using the techniques identified by Abraham and Michie's (2008) and Herek *et al.*'s (2001) coding frames.

Coding the DVD was carried out independently by the author and one other independent author (a health psychology trainee). The first stage of coding was for each author to write down any quotes in the DVD that they thought pertinent, along with the identity of the speaker and the time in the DVD that the statement occurred (for example, 4.26min: Dr. "Basically if you're not wearing a condom you'll be at risk of all the infections"). Quotations were then grouped into themes, with each theme being illustrated with relevant quotations. These themes were then compared with the existing techniques identified by Abraham and Michie's (2008) and Herek *et al.*'s (2001) coding frames. Both authors also documented any themes they felt were present, that were not captured by either existing coding frames.

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<sup>2</sup> For example, as a percentage of diagnosed persons accessing HIV-related care the crude mortality rate has declined from 4.7% (749/16,075) in 1997 to 0.95% (497/52,083) in 2006 in the UK (Health Protection Agency, 2007).

Following independent coding, both authors came together to compare their findings. Coding results for both authors were similar; however they were not identical so each quote and theme which each author had listed was discussed. Each discrepancy (i.e., when a quote was missing from one of the authors coding frames or a quote was placed in a different category) was discussed and an agreement made about which category the quote had the greatest fit. At this stage some quotes were dropped, as it was agreed by the authors that if it was not easy to place the quote in an existing theme or agree upon a possible new theme that could incorporate it, then the message was not clear and did not warrant inclusion.

### **1.16 Themes identified in the Bedroom Business DVD**

Together both authors agreed the final coding themes and quotations which were written into a final coding frame (see Table B1 Coding Frame for the Bedroom Business DVD, at the end of the introduction).

The following themes were identified as being present in the Bedroom Business DVD:

1. General information about sexual health (common STIs and where to get help and advice);
2. Information about the behaviour-health link (viewer perceived vulnerability/susceptibility to STIs);
3. Information on consequences of using a condom (attitudes towards condom use; information on consequences of using/not using a condom);
4. Information about others' approval (social norms about safer sex);
5. Perceived severity (severity of consequences of STI infection);
6. Information on consequences of becoming a teenage parent (attitudes towards teenage parenthood);
7. Lack of knowledge (myths or lack of knowledge about STIs) and
8. Effects of alcohol and drug use (role of alcohol and recreational drug use in safer sex).

Coding the DVD revealed that some of the messages it contained mapped onto the themes revealed by Herek *et al.*'s analysis of AIDS education videos. Specifically both Herek *et al.* and the current coding frame contain the theme 'general information'. Herek *et al.* also identified a theme termed 'audience

vulnerability' which mapped onto the theme named here as 'information about the behaviour-health link'. Herek *et al.*'s theme 'social norms' can also be mapped onto the technique 'provide information about others' approval'. It was noticeable that there were a number of themes that existed in Herek *et al.*'s coding frame that were *not* present in the current DVD, for example, 'Interpersonal aspects of sexual risk reduction' (e.g. discussions of how to negotiate with a partner about safer sex) and 'Techniques of Sexual Risk Reduction' (e.g., verbal explanations of how to use condoms during sex).

Themes two, three and four in the Bedroom Business coding frame are present in Abraham and Michie's (2008) taxonomy of behaviour change techniques and for consistency the themes in the current study utilise the same terms used by Abraham and Michie (2008).

Some of the themes identified in the DVD match those of the TPB. For instance, the technique 'Provide information on consequences' (theme 3) corresponds with the attitude construct in the TPB and the technique 'provide information about others' approval' (theme 4) corresponds to the subjective norm component of the TPB. The presence of messages in the DVD identified as referring to attitude and subjective norm lends support to the selection of the TPB as the model with which to evaluate the intervention.

In terms of attitudes, the DVD deals with the consequences of using condoms and the benefits and costs of action and inaction, by promoting the message that using condoms will protect against infections and by not using condoms, exposes one to risk of infections and teenage pregnancy. For example, during the DVD a sexual health professional states, "You can have a different partner every night and use a condom and be safe, you can sleep with one person once and have HIV".

The DVD also contains messages which target social norms supporting safer sex, for example, there are a couple of scenes where groups of young people advocate using condoms. For example, a young man whilst standing with his friends says "we lead a healthy life, a fun life, we're cool guys and we still have good sex, you know safe sex". There are also statements from young people recommending safer sex behaviours, for example, one young man says "I get check-ups frequently" and another says "I always have protected sex" and the presenter then shakes his hand.

Coding revealed that the DVD did not include messages for all of the variables in the TPB; obvious messages designed to increase PBC were noted as absent.

After discussion with a fellow trainee health psychologist, it was agreed that some of the themes identified by the coding were not sufficiently prevalent in the DVD to warrant inclusion in the questionnaire to evaluate the intervention. These were themes five, six, seven and eight, i.e., perceived severity, attitudes towards becoming a teenage parent, lack of knowledge and effects of alcohol and drug use. For example, although there were a couple of quotes that chlamydia could cause infertility which were coded under the theme 'severity', it was felt that this was not given sufficient emphasis to warrant inclusion of a measure of perceived severity in the questionnaire.

### **1.17 The most salient message of the DVD: increasing perceptions of susceptibility to STIs**

Both authors identified that the most salient message of the DVD was the behavioural change technique, 'Information about the behaviour-health link'. The main aim of the DVD appeared to be to highlight the high prevalence of STIs amongst young people, and thus increase young people's sense that they were at risk of catching an STI from unprotected sex. There were several instances where professionals spoke of the statistics concerning rates of STIs amongst young people, for example a sexual health professional says, "young woman under 25 are one of the highest risk groups for contracting HIV at the moment...chlamydia and gonorrhoea are on the increase. In the last few years these infections have gone up by 300%, 400%". In addition, there are statements about not being able to tell if someone is infected with an STI, for example the presenter says at the beginning of the DVD, "most STIs have no clear symptoms."

The behaviour change technique 'provide information about behaviour-health link' was identified by Abraham and Michie (2008) and described as 'general information about behavioural risk, for example, susceptibility to poor health outcomes or mortality risk in relation to the behaviour'. It also corresponds to the psychological constructs termed perceived susceptibility or vulnerability<sup>3</sup>. Two models developed specifically to predict health behaviour, the HBM and Protection Motivation Theory (PMT) (Rogers, 1975) both focus on the notion of threat appraisal. Both the HBM and PMT conceptualise threat appraisal as perceived susceptibility or vulnerability<sup>4</sup>, (e.g., 'It is unlikely that I will contract

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<sup>3</sup> The terms 'perceived risk', 'risk', 'susceptibility' and 'vulnerability' are used interchangeably here.

<sup>4</sup> The term susceptibility is used by the HBM and the term vulnerability by the PMT

lung cancer”) and severity (e.g., “I would die soon after contracting lung cancer”). Susceptibility and severity beliefs are outcome expectancies, that is, beliefs about what will happen if the person does or does not perform a particular action or sequence of actions.

There is some debate about the measurement of susceptibility beliefs. Weinstein and Nicolich (1993) have argued that when previous behaviour is not controlled for, correlations may reflect the impact of behaviour on perceived susceptibility, rather than vice versa, so that those who take more precautions perceive less risk (Weinstein & Nicolich, 1993). This latter problem may be addressed by controlling for reported health behaviours and measuring anticipated personal susceptibility in the absence of taking precautions (Sheeran & Abraham, 1996; Van der Pligt, 1998). For example, Van der Velde, Hooykaas and Van der Pligt (1996) found that ‘conditional’ measures of perceived susceptibility (which specified taking no precautions) were more likely to be related to intention than ‘unconditional’ assessments. An example of a conditional vulnerability item is: ‘If I do not use condoms, I run a high risk of getting HIV/AIDS’.

With this in mind and considering the importance placed on trying to increase young people’s perceived vulnerability to STI infections in the DVD, it was considered important to include a measurement of perceived vulnerability to STIs in the evaluation of the current intervention. As recommended by previous research, conditional measures of perceived vulnerability will be utilised as opposed to unconditional assessments.

### **1.18 Research Aim**

Health promotion campaigns are rarely subject to rigorous evaluation and the need for effective high quality personal, relationship and sexual health education is of paramount importance (Ellis & Grey, 2004). Arguably this need has never been greater. This study will utilise an experimental evaluation design to evaluate the Bedroom Business DVD for use in school settings. Schools have been recognised as an important setting for safer sex interventions (Henderson *et al.*, 2007; UNAIDS, 1997). The school environment plays a pivotal role in the socialisation and development of young people and contains an established infrastructure and systems into which interventions can be incorporated. For the present study, school settings were selected because of their practicality for reaching young people within the target age range of the Bedroom Business DVD. Accessing young people in schools for research studies is one of the most

resource-efficient methods and has been adopted in health research in many countries. Moreover, given that the vast majority of young people attend school, at least in developed countries, it is a valuable opportunity to recruit a sample which is broadly representative of the wider youth population (Testa & Coleman, 2006).

The current study will evaluate whether or not using a sexual health intervention utilising film and music entitled Bedroom Business offers an inexpensive intervention to enhance the cognitive antecedents of condom use, such as attitudes, subjective norms and self-efficacy. Although the intervention was not based on any particular psychological theory or model, the aim of this research is to evaluate the effectiveness of this intervention using the TPB, which research has consistently identified as an evidence based theoretical model able to predict condom use behaviour. Therefore, the outcome measures will be those that have been identified by:

- 1) The TPB (intention, attitude, behavioural beliefs, subjective norm and PBC);
- 2) Previous research as having a strong relationship with condom use (descriptive norm, condom use self-efficacy, condom use skill, condom communication self-efficacy, condom use preparatory actions and knowledge);
- 3) Analysis of themes present in the Bedroom Business DVD (perceived risk of STI infection).

The research aim is to evaluate the Bedroom Business DVD in terms of its capacity to enhance the cognitive antecedents of condom use. An experimental pre- and post-test design will be employed which will compare two conditions: 1) control condition in which there will be no intervention and 2) intervention condition, where participants will view the Bedroom Business DVD and participate in a group discussion. The current intervention will employ both DVD viewing and group discussion as it was the intention of the DVD when it was produced that it would be used to facilitate group discussion. Participants in the each condition will complete identical measures at baseline and four week follow-up. Schools will be randomised to either the control or intervention condition.

### **1.19 Hypothesis**

The hypothesis is that the Bedroom Business DVD will lead to greater changes in the cognitive antecedents of condom use than a no intervention control.

**Table B1. Coding Frame for the Bedroom Business DVD**

**Notes**

\* indicates technique is present in taxonomy of behaviour change techniques in interventions (Abraham and Michie, 2008)

† indicates technique is present in the TPB

~ indicates technique is present in Herek *et al.*'s (2001) coding frame of AIDS educational videos ('Information about the behaviour-health link' was termed 'audience vulnerability' and 'provide information about others' approval' was termed 'Social Norms' in Herek *et al.*'s coding frame).

| Content Category   | Examples of Themes  | Bedroom Business DVD quotation<br>(time quote occurs in DVD, identity of speaker and transcription of quote)  |
|--|---|---|
| <p><u>1. General information about sexual health~</u></p> <p>⇒ Information about sexually transmitted infections (STIs) and where to get help and advice</p> | <p>° Information about STIs, such as AIDS and HIV</p> <p>° Explanation of where young people can get advice and information</p> | <p>7.24min: <u>Sexual health outreach worker</u> "Brook has clinics in London where young people can go specifically to get free confidential information and advice"</p> <p>17.20min: <u>Sexual health outreach worker</u> "What HIV does is it attacks the immune system, when the immune system gets to its lowest point, eventually it becomes what we call AIDS"</p> |



|  |   |  |
|--|---|--|
| <p><u>2. Information about behaviour-health link* ~</u><br/>⇒ perceived susceptibility/vulnerability to STIs</p> | <p>°Statements that young people are at risk for STIs</p> <p>°Explanation that STIs can be transmitted by a health-appearing person</p> <p>°Explanation that some STIs do not have any symptoms</p> | <p><u>47sec: Presenter</u> “Most STIs have no clear symptoms”</p> <p><u>1.28min: Young woman</u> “It’s one of those things where people think it’s never gonna happen to me, it’s gonna happen to someone else.”</p> <p><u>1.38min: Youth worker</u> “Far too many young people have Chlamydia”</p> <p><u>4.34min: Dr.</u> “the most common STI in your age group is Chlamydia”</p> <p><u>5.10min: Sexual health nurse</u> “they say about 70% of the sexually active population over the age of 25 carry the genital wart virus so imagine if your in a room with 10 people, at least 7 will have the genital wart virus”.</p> <p><u>6.38min: Young man</u> - “I didn’t realise it was as many as 1 in 3”</p> <p><u>7.46min: Sexual health outreach worker</u> – “There’s still a lot of young people who think it’s not gonna happen to them. Everyone thinks they can tell by looking whether someone has an infection or not”</p> <p><u>7.58min: Sexual health outreach worker</u> “young woman under 25 are one of the highest risk groups for contracting HIV at the moment...chlamydia and gonorrhoea are on the increase. In the last few years these infections have gone up by 300, 400%”.</p> <p><u>15.40min: Presenter</u> – “...HIV, STDs and all these kind of diseases and infections you can get, we think gay people”</p> <p><u>15.51min: - Drag Queen</u> – “everyone can get it, everyone’s open to it, and everyone needs to be careful”</p> |
|--|---|--|

|   |   |  |
|---|---|--|
|   |   | <p>17.00min: <u>HIV positive man</u> “a lot of young people think it won’t happen to them, that it’s only gay people, drug users, prostitutes...on a global scale HIV is a youth disease, over 50% of cases are aged under 25, so it’s a young people’s disease, you know I got it when I was 17”</p>  |
| <p><u>3. Information on consequences*†</u><br/>⇒ Attitudes; information on consequences of using/not using a condom</p> | <p>° Consequences of using condoms, including the benefits and costs of action and inaction</p>   | <p>4.26min: <u>Dr.</u> “Basically if you’re not wearing a condom you’ll be at risk of all the infections”</p> <p>6.45min: [presenter: what do you think about using condoms?] <u>Young man</u> “Condoms, probably a God send in today’s day and age.”</p> <p>7.52min: <u>Sexual health outreach worker</u> “You can have a different partner every night and use a condom and be safe, you can sleep with one person once and have HIV”</p> <p>23.54 <u>Young woman</u> “If your not using condoms you need to sort it out and start wearing condoms otherwise you’ll get a nasty disease”</p> |
| <p><u>4. Provide information about others’ approval*†~</u><br/>⇒ Social norms about safer sex</p>                       | <p>° Personal testimonials from young people about risk reduction (e.g., using condoms)</p> <p>° Depiction of group discussion in which the group reinforces risk reduction</p> | <p>3.27min: <u>Young man</u> “I get check-ups frequently”</p> <p>7.09min: <u>Young man</u> “I always have protected sex” [presenter shakes hand with young man]</p> <p>19.30min <u>Young man (speaking in group of young people)</u> “we lead a healthy life, a fun life, we’re cool guys and we still have good sex, you know safe sex”</p> <p>23.50min <u>Group of young men saying together</u> “Use condoms!”</p>  |

|   |  |  |
|---|--|--|
|   |  | <p>24.00min <u>Young man</u> [Whilst holding condom] “I’m getting better, I’ve started using protection”</p> <p>24.02min <u>Young man</u> “dancers use condoms”</p>  |
| <p><u>5. Perceived severity ~</u></p> <p>⇒ Severity of consequences of STI infection</p>                                | <ul style="list-style-type: none"> <li>○ Statement that left untreated STIs can have serious consequences (e.g., Chlamydia can lead to infertility)</li> <li>°Statement that no cure or vaccine is currently available for HIV</li> <li>○ Explanation of the consequences of STI infections</li> </ul> | <p>4.52min: <u>Young man</u> “[Chlamydia] scar’s the fallopian tubes so it can make you infertile”</p> <p>5.25min: <u>Two young men</u> “warts and herpes...you can get stuff around your mouth”.</p> <p>9.24min: <u>Young woman</u> “we watch Hollyoaks, we shouldn’t have to watch that to find out oooh she’s got Chlamydia, she might be infertile!”</p> <p>17.16min: <u>Young man</u> “AIDS won’t clear up”</p>   |
| <p><u>6. Attitudes toward being a teenage parent</u></p> <p>⇒ Information on consequences of being a teenage parent</p> | <ul style="list-style-type: none"> <li>○ Statements that having a baby as a teenager can limit your lifestyle</li> <li>○ Statements about what to do if you become pregnant as a teenager</li> </ul>   | <p>13.20min: <u>Young man</u> – “if you had a child when you’re a teenager your not gonna be able to hang round with your friends and not do normal teenage stuff”</p> <p>23.19min: <u>Young man</u> – “If a girls pregnant I couldn’t tell her no don’t do it, but in my mind I’ll be saying nah it’s not messing up my life cause I wanna do things in my life and I’m not letting a baby hold me back cause I’m a teenager”</p> <p>23.29min: <u>Young woman</u> – “I wouldn’t wanna be pregnant now or get an STD, I mean I got my own plans I wanna do things I don’t wanna be held back”.</p> |

|   |   |   |
|---|---|---|
| <p><u>7. Lack of knowledge~</u></p> <p>⇒ Myths or lack of knowledge about STIs</p>                                | <ul style="list-style-type: none"> <li>○ Statements that young people do not know about STIs, for example, what they are, how they are transmitted etc.</li> <li>○ Statements which show lack of knowledge, for example, it's only women who are at risk of STIs</li> </ul> | <p>1.01min: <u>Young man</u> – “It’s mainly woman ain’t it”</p> <p>1.10min: <u>Young man</u> -“I don’t actually know at all...”</p> <p>4.50min: <u>Young man</u> – “Men are the carriers”</p> <p>10.00min: <u>Chinese men</u> – “actually I didn’t know HIV”</p> <p>17.19min: <u>Young man</u> – “Not really what it is”</p>  |
| <p><u>8. Effects of Alcohol and Drug use ~</u></p> <p>⇒Role of alcohol and recreational drug use in safer sex</p> | <p>°Explanations that alcohol use can interfere with risk reduction</p> <p>°Explanations that recreational drug use can interfere with risk reduction</p> <p>°Advice about how to practice safer sex even when using recreational drugs</p>                                 | <p>12.33min: <u>Young girl</u> – “...and he doesn’t remember what happened, and he wakes up in peoples houses...”</p> <p>12.36min: <u>Dr.</u> – “sometimes its drug related, other times its alcohol fuelled.”</p> <p>12.54min: <u>Young girl</u> – “if you drink that doesn’t mean that you have to go home with someone.”</p> <p>13.10min <u>Young woman</u> “Don’t go out to get so drunk that you don’t know what you’re doing”</p> |



## **2. METHOD**

### **CONTENTS**

|     |                                  |    |
|-----|----------------------------------|----|
| 2.1 | Calculating required sample size | 71 |
| 2.2 | Design                           | 73 |
| 2.3 | Participants                     | 74 |
| 2.4 | Materials                        | 75 |
| 2.5 | Procedure                        | 86 |



## **2. METHOD**

### **2.1 Calculating required sample size**

#### **Statistical Power**

Statistical power is defined as the probability of avoiding a Type II error (rejection of the research hypothesis even though it is true) and is symbolised by  $\beta$ . The power of a test is  $1 - \beta$ . It is recommended that a reasonable level of power to aim for under normal circumstances is 0.8 (Clark-Carter, 1997; Cohen, 1992). Thus, the probability of making a Type II error ( $\beta$ ) is  $1 - 0.8 = 0.2$ .

To proceed with a power calculation to detect the required sample size, an estimate of the effect size is needed. The effect size of the current intervention is unknown, as it has not been examined previously and therefore must be estimated based on previous research. Research by Krahe *et al.* (2005)<sup>5</sup> was selected as appropriate to base the estimation, as it has a similar low level safer sex intervention carried out in schools and uses an experimental design.

#### **Effect size calculation**

To calculate the effect size, the change scores for the experimental group and the control group in Krahe *et al.* were calculated, after controlling for pre-intervention scores (i.e. post-intervention minus pre-intervention score) using Cohen's  $d$  formula for an independent  $t$  test. The equation for calculating Cohen's  $d = \text{Group 1} - \text{Group 2} / \text{standard deviation of change scores}$ .

To calculate Cohen's  $d$  thus requires calculation of the standard deviation of the change scores. This can be generated using the formula:

$$\text{Standard deviation of change scores} = \sigma \sqrt{2(1 - \rho)}.$$

In this instance,  $\sigma$  is the standard deviation of the baseline scores on the intention to use condoms scale (0.93) and  $\rho$  is the reliability of the scale (0.83) as identified by Krahe *et al.*

Therefore:

$$0.93 \sqrt{2(1 - 0.83)} = 0.542$$

Thus, using this formula, the standard deviation of the change scores can be estimated as 0.542.

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<sup>5</sup> This study is described in the introduction



The change scores for the control and intervention groups can be calculated using the post-intervention scores minus the pre-intervention scores derived from Krahe *et al.*

Thus:

Change score for control condition = 3.52 (post-intervention score) - 3.63 (pre-intervention score) = -0.11

Change score for experimental condition = 3.8 (post-intervention score) - 3.63 (pre-intervention score) = 0.17

The equation for calculating Cohen's  $d = \text{Group 1} - \text{Group 2} / \text{standard deviation of change scores}$

Therefore Cohen's  $d = (-0.11 - 0.17)/0.542 = 0.517$

According to Cohen (1992) this is a medium effect size.

### **Power calculation**

Cohen's (1992) power tables were utilised to estimate the sample size required for the present study.

The following figures were utilised:

Alpha level = 0.05

Effect Size, Cohen's  $d = 0.517$

Power = 0.8

Number of groups = 2

This showed a total sample size of 128 was required (i.e., 64 participants per group).

### **Anticipated Attrition**

It is to be expected that there will be some attrition of participants. For example, Krahe *et al.* (2005) had a baseline sample of 299 students, with a final sample of 230 students at four week follow-up. This represents a drop-out rate of 23%. If a similar attrition rate is estimated for the present study, in order for a final sample of 128 students, a baseline sample of approximately 170 students is required (i.e., 85 students per group).

## **2.2 Design**

An experimental design was employed. A 2 x 2 mixed study design was utilised with two independent variables: Experimental Condition (Between subjects: 2 levels: control and intervention) x Time Point (Repeated measures: 2 levels: baseline and follow up). The intervention took place immediately after the baseline data was collected and follow-up was 4 weeks after the experimental manipulation.

### **School participation**

There are six Secondary Schools in Westminster and for pragmatic reasons it was decided to select the schools with the two largest sixth forms (School 1 and School 2<sup>6</sup>), as based on the school roll data provided by Westminster City Council it was theoretically possible to carry out the study in these two schools only to achieve the required sample size. In addition, the schools had a similar student population, with both having a mixed gender sixth form and a diverse population in terms of ethnic background and religion. However, after conducting the first session in both schools it became apparent that attendance was dramatically lower than indicated by the school roll. For example, although 118 students were registered as being in Year 12 at School 2, approximately half this number was present at the time of data collection. As a result, to achieve the desired sample size it was necessary to involve two further schools. Schools 3 and 4 were approached due to also having relatively large mixed gender sixth forms.

Data on the number, gender, ethnicity and religion of students attending all state maintained secondary schools in Westminster in Years 12 and 13 was obtained from Westminster City Council prior to the study commencing (see appendix B3). Free school meal data was also obtained, which provides an indication of socio-economic status. At May 2008, the percentage of children eligible for free school meals for the four schools that participated in the study was: School 1 (47%), School 2 (24%), School 3 (42%) and School 4 (39%).<sup>7</sup>

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<sup>6</sup> School names have been anonymized

<sup>7</sup> Pupils are entitled to free school meals if their parents receive: income support or income-based jobseeker's allowance or support under part VI of the Immigration and Asylum Act 1999 or child tax credit, but are not entitled to working tax credit and have an annual income that does not exceed a set figure (as assessed by the Inland Revenue).

## **Randomisation**

Consideration was given as to whether it was preferable to vary the experimental condition within each school (i.e., randomly assign classes to receive either the control or the intervention), or to vary condition between schools. Due to concern about potential contamination between conditions, it was decided to vary the experimental condition between schools. A person who was unfamiliar with secondary schools in Westminster and the nature of the study was asked to randomise the schools to either the intervention or control condition. Schools 1 and 4 were randomly assigned to receive the intervention condition and schools 2 and 3 to receive the control condition.

## **2.3 Participants**

Eligible students were sampled on a 'take-all' basis on the day of data collection. Since all students in the study were aged between 16-18 years, none of the schools opted to seek parental or carer consent for students to participate, since attendance is elective and students are of legal age to consent to intercourse. Thus consent to take part rested with individual students.

323 students were present in school at the first point of data collection, of which 306 (95%) agreed to take part. Due mainly to poor attendance in school at follow-up, the sample size with measures for both data points was 149<sup>8</sup>. As a result of a high percentage of missing values, two cases were deleted leaving a final sample size of 147. There were 61 participants in the intervention condition and 86 in the control condition.

Participants were from school 3 (52; 35.4%), school 4 (40; 27.2%), school 2 (34; 23.1%) and school 1 (21; 14.3%). Participants were in Years 12 and 13 (i.e., the sixth form), with the majority being from Year 12 (127; 86.4%). The age range of the sample was 16 to 19 years old, with a mean age of 16.88 (SD = .729). In terms of gender, the sample was relatively matched with 66 male (44.9%) and 81 female (55.1%) participants. The majority of the sample reported being attracted to people of the opposite sex only (130; 88.4%), with the remainder reporting they were attracted to people of the same sex only (1; 0.07%), both the same and opposite sex (5; 3.4%) or were not sure (11; 7.5%). There was diversity in terms of participants' ethnic background. The majority identified as White British (32.7%), followed by Black African (12.2%), Arab (10.9%), White

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<sup>8</sup> Of the 157 dropouts from baseline to follow-up, 93 were in the intervention condition and 64 were in the control condition

Eastern European (4.8%), Black Caribbean (4.1%) and Bangladeshi (3.4%). In terms of religious orientation, the largest percentage of respondents identified as Muslim (34.0%), followed by Christian – Other (15.6%), Christian – Church of England (15.0%) and Christian – Roman Catholic (8.2%). 19.7% of the sample reported that they did not believe in a religion/God.

Participants identified as living in one of 13 of the 32 London Boroughs, demonstrating that many of the young people attended school outside their Borough of residence. The biggest percentage of students reported that they were Westminster residents (44.2%), followed by Camden (12.9%), Brent (12.2%) and Lambeth (5.4%).

In terms of sexual experience, 53 (36.1%) of the sample reported they had experienced sexual intercourse (47% of the male and 27.5% of the female respondents). The majority of sexually experienced participants had had only one sexual partner, 21 (14.3%); 18 (12.3%) reported that had had two or three sexual partners and 13 (8.8%) reported they had had sexual intercourse with 4 or more people<sup>9</sup>. Of the 36.1% whom reported that they had had sex, 28 (19%) were currently in a relationship, with the majority (18; 12.2%) reporting this relationship had lasted between 0 and 6 months.

Participants were also asked whether they had had sexual intercourse in the last month; 26 (17.7%) of the sexually experienced participants reported they had. The majority of these participants had had sex with only one partner in the last month (22; 15%). 22 (15%) of the 26 participants had used a condom for sex in the last month. Participants were also asked about condom use errors; 3 (13.6%) of those who had used a condom reported that they had experienced a condom breakage in the last month and 6 (27.3%) reported that they had put a condom on late.

## **2.4 Materials**

### **Questionnaire Design**

A number of established sources were consulted to provide guidance for writing the TPB questionnaire items (Ajzen, 2006; Conner & Sparks, 2006; Francis, Eccles, Johnston *et al.*, 2004). Ajzen (2006) provides guidance around constructing a TPB questionnaire that complies with the principal of compatibility (described below). Francis *et al.*, (2004) provides a step-by-step guide in the form of a manual for health services researchers on constructing a TPB

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<sup>9</sup> One student responded that they did not know (0.7%).

questionnaire. Conner and Sparks (2006) also provide examples of TPB measures applied to different behaviours taken from the research literature. Guidance was also sought from existing sexual health questionnaires used in school settings (Abraham *et al.*, 2004; Krahe *et al.*, 2005; Testa & Coleman, 2006).

#### The Principle of Compatibility

Ajzen (2006) describes how the target behaviour should be defined carefully in terms of its Target, Action, Context and Time (TACT), that is, behaviour consists of: a) an action (or behaviour), b) performed on or toward a target or object, c) in a particular context and d) at a specified time or occasion. In the current study, this is operationalised as: Target (sexual intercourse), Action (using a condom), Context (type of partner: casual or steady) and Time (forthcoming month). However Ajzen (2006) points out defining the TACT elements is somewhat arbitrary; what is important is that the *principle of compatibility* is observed (Ajzen & Fishbein, 1977; Fishbein & Ajzen, 1975). This principle requires that all constructs (attitude, subjective norm, PBC, and intention) be defined in terms of exactly the same elements and should refer to the same level of generality. Ajzen (2006) provides the example of the behaviour of “*walking on a treadmill in a physical fitness centre for at least 30 minutes each day in the forthcoming month*”. With this example, the attitude compatible with this behaviour is the attitude toward walking on a treadmill in a physical fitness centre for at least 30 minutes each day in the forthcoming month, the subjective norm is the perceived social pressure to do so, PBC refers to control over performing the defined behaviour and we must assess intention to perform this behaviour. In the current study the behaviour is using a condom for sexual intercourse every time sex occurs in the forthcoming month with a steady or casual partner.

#### Defining partner type

It was considered important in the current study to define what is meant by ‘casual’ and ‘steady’ partner. A review of the literature indicates that although reviews of condom use measurement recommend that partner type is specified (see Noar *et al.*, 2006; Sheeran & Abraham, 1994), how best to *define* different types of partner is not clear and there are no recommendations for best practice. Attention needs to be placed on the terminology used in order to characterise types of partners because there are variations in respondents’ understanding of

the terms 'steady' and 'casual'. It has been suggested that glossaries or clear definitions of terms might help reduce this problem (Sheeran & Abraham, 1994). The non-existence of agreed upon definitions in the research literature, led to definitions being developed for the current study. A *casual* partner is defined as 'someone you have sex with once or infrequently (i.e., one night stand)' and a *steady* partner is defined as 'someone you have sex with in an exclusive relationship, where you are only having sex with each other and no-one else (i.e., a steady boyfriend/girlfriend)'. These definitions were clearly stated in the questionnaire.

#### Questionnaire measures distinguishing partner type

A full set of TPB questions specifying casual partner and a full set of TPB questions specifying steady partner would be preferable from a psychometric perspective, increasing the reliability of the measures, however it is impractical for this type of research. Questionnaire length is an important consideration in school based research and a long questionnaire has been found to be unsuitable. For example, Abraham *et al.*, (2004) used a questionnaire in the classroom for students aged 14-16 in an evaluation of a school sex education programme and report it was important "to minimise repetition which respondents found frustrating and de-motivating" (p. 694). Thus it was decided against the option of having a full set of measures for both casual and steady partners as this would increase the length of the questionnaire considerably.

To compromise between the need to distinguish between partner type and the need to ensure the questionnaire was not unwieldy, a compromise position was taken whereby the questionnaire had a full set of items for each of the TPB constructs regarding condom use with casual partners and a single item measure concerning steady partners. Although single item measures are not preferable from a psychometric perspective, they are necessary here due to needing to create a questionnaire acceptable in the classroom environment. This resolution has been successfully employed in previous research in a school setting (Abraham *et al.*, 2004).

#### Sex act specificity

In addition to highlighting the importance of specifying partner type, researchers (Noar *et al.*, 2006; Sheeran & Abraham, 1994) have advocated that measures be specific to type of sex act, i.e., questions should specifically refer to type of sex, such as vaginal, anal and oral sex. In the current study participants will be

asked about sex, clearly defined as either a man's penis in a woman's vagina (vaginal intercourse), a man's penis in a woman's anus (anal intercourse) or a man's penis in a man's anus (anal intercourse). Definitions of what was meant by sex were clearly stated in the questionnaire. Participants were asked about penetrative sexual intercourse as defined as vaginal and/or anal sex as opposed to oral sex because of the greater risk of STI transmission through vaginal and anal sex (Edwards & Carne, 1998). In addition, having separate items for each type of sex act (i.e., oral, vaginal and anal) for each construct created a great number of questions and was too cumbersome. As with partner type, it was decided to sacrifice some specificity for greater simplicity and a shorter questionnaire, taking into account the population being studied, i.e. school aged students, and the time constraints to allow students to complete the questionnaire within a standard class period.

### **Details of the Questionnaire**

The questionnaire was divided into three parts (the entire questionnaire can be seen in appendix B4).

#### Part 1: Demographic information.

The first section of the questionnaire required participants to state the following demographic information: gender, age, year group, sexuality, ethnicity, London borough of residence and religion.

#### Part 2: Sexual behaviour.

The second section of the questionnaire required participants to state their sexual experience. Participants were asked whether they had ever had sexual intercourse and if so, with how many different partners. If participants had never had sexual intercourse they were instructed to continue to part three. Participants were asked to report whether they were in a relationship and if so, how long they had been with their current partner. Participants were also asked whether they had had sexual intercourse in the last month and if so, the number of different people they had had sexual intercourse with. Two items were included that asked about condom use errors. Participants were asked to report the number of times they had a condom break, leak or slip off the penis in the last month. They were also asked the number of times they had put a condom on after starting sex or had taken the condom off before sex was over. Finally, participants were asked to report how frequently they had used a condom.

Response options were: never, not very often, about half the time, most of the time and always.

### Part 3: Cognitive antecedents of condom use.

The third section of the questionnaire required participants to answer questions about the cognitive antecedents of condom use. Thirteen measures were employed. For all measures, a 5 point Likert scale was adopted excepted where stated.

#### 1) Intention

Intention towards using a condom with a casual partner was measured with 3 items as recommended by Ajzen (2006), Conner and Sparks (2006) and Francis *et al.* (2004). As stipulated by Ajzen (2006), the words “intend”, “will try” and “plan” were chosen to form the different items of intention (e.g., “I intend to use a condom every time I have sex in the next month with a casual partner”). One item was selected to measure intention for condom use with a steady partner and read “I intend to use a condom every time I have sex in the next month with a steady partner”. A score of 1 indicated strongly disagree to 5 indicating strongly agree.

#### 2) Attitude

Attitude was measured with a direct measure of attitudes towards using a condom with a casual partner and with a steady partner. Participants were asked to indicate their attitude using a semantic differential scale using bipolar adjectives (taken from the evaluative dimension of Osgood, 1957). Five items were included to measure attitude toward condom use with a casual partner, following Francis's *et al.*'s (2004) recommendations to use four items and Conner and Sparks (2006) who state ‘typically 4-6 differentials are used and these tend to show high internal reliability ( $\alpha > 0.9$ ) (p.197).’ As recommended by Francis *et al.* (2004) and Ajzen (2006), the adjectives included instrumental items (i.e., whether the behaviour achieves something, such as, worthwhile-valuable, harmful-beneficial) and what have been termed experimental or affective items (i.e., how it feels to perform the behaviour, such as, pleasant-unpleasant, enjoyable – unenjoyable). For example, “For me using a condom every time I have sex in the next month with a casual partner would be...worthless – valuable”. In addition, following Ajzen (2006), the ‘good-bad’ scale is included as this captures overall evaluation. Response options are



derived from Ajzen (2006). The good-bad scale *only* will be used to measure attitude toward condom use with a steady partner. A score of 1 indicates a negative attitude toward condom use, and 5 indicates a positive attitude toward condom use.

### 3) Behavioural beliefs

Four behavioural beliefs in relation to condom use were measured (“using condoms makes sex less intimate and romantic”, “condoms are messy”, “using condoms means less physical pleasure from sex” and “condoms break the mood for sex”). These items were adopted from Krahe *et al.* (2005) who found these items to have good internal reliability (demonstrating Cronbach’s (1951) alpha coefficients of .89, .91 and .94 at three time points). A score of 1 indicated not at all true and 5 indicated very true, thus a lower score indicated a more positive belief towards condom use. These four items were reversed scored prior to analysis.

### 4) Perceived vulnerability

Three items were used to measure perceived vulnerability to STI infection (e.g., “if I do not use condoms, I run a big risk of getting infected with a sexually transmitted infection”). These items were adapted from Boer and Mashamba (2005) and were measured with a conditional measure of vulnerability as advocated by Van der Velde *et al.* (1996). Boer and Mashamba (2005) reported good internal reliability of the scale (Cronbach’s  $\alpha = .74$ ). A score of 1 indicates strongly disagree and 5 indicates strongly agree.

### 5) Subjective norm

Four items were used to measure subjective norm concerning condom use with a casual partner and two items concerning condom use with a steady partner. The items read: “Most people who are important to me think that I should use a condom every time I have sex in the next month with a (casual/steady) partner?”, “My friends think that I should use a condom every time I have sex with a casual partner in the next month?”, “It is expected of me that I should use a condom every time I have sex with a casual partner in the next month?” and “My (steady/casual) sexual partner/s will think that we should use a condom every time we have sex in the next month?”. The stem of these items followed Krahe *et al.* (2005) (“most people” and “my steady/casual sexual partner/s”), Conner and Sparks (2006) (“my friends think”) and Francis *et al.* (2004) (“it is

expected of me"). A score of 1 indicates strongly disagree and 5 indicates strongly agree.

#### 6) Descriptive norm

Three items are used to measure descriptive norm with a casual partner and one item refers to a steady partner. The items read: "Most of my friends will use a condom every time they have sex with a casual/steady partner in the next month?", "Most young people my age will use a condom every time they have sex with a casual partner in the next month?" and "Most people who are important to me will use a condom every time they have sex with a casual partner in the next month?" A score of 1 indicates strongly disagree and 5 indicates strongly agree.

#### 7) Perceived behavioural control (PBC)

Four items were used to measure PBC with a casual partner and one item with a steady partner. The items read "How much control do you have over whether you will use a condom every time you have sex with a casual/steady partner in the next month?" (a score of 1 indicates no control and a score of 5 indicates complete control), "I feel in complete control of whether or not I use a condom every time I have sex with a casual partner in the next month", "It is mostly up to me whether or not I use a condom when I have sex with a casual partner in the next month?" and "It is mostly up to me whether or not I discuss condom use when I have sex with a casual partner in the next month?" (a score of 1 indicates strongly disagree and a score of 5 indicates strongly agree). The stem of these items were selected following Ajzen (2006) ("how much control" and "it is mostly up to me") and Conner and Sparks (2006) ("I feel in complete control").

#### 8) Self-efficacy

The internal reliability of PBC items has frequently been found to be low (for example, Ajzen, 2002; Sparks, 1994) such that separate assessment of controllability and self-efficacy is now recommended (Ajzen, 2002; Francis, Eccles *et al.*, 2004). Items concerned with the ease or difficulty of performing a behaviour, or confidence in one's ability to perform it, are often said to measure perceived self-efficacy (Ajzen, 2002). Four items were used to measure self-efficacy with a casual partner and one item with a steady partner: "I am confident that I will be able to use a condom every time when I have sex with a casual/steady partner in the next month?", "I am confident that I will be able to

use a condom every time when I have sex with a casual partner, even after a drink or two” , “I am confident that I will be able to use a condom every time when I have sex with a casual partner, even if I get very excited and can’t wait” (a score of 1 indicates strongly disagree and a score of 5 indicates strongly agree). “For me to use a condom when I have sexual intercourse with a casual partner in the next month will be...” (a score of 1 indicates very difficult and a score of 5 indicates very easy). Items are derived from Conner and Sparks (2006), Ajzen (2006) and Krahe *et al.* (2005).

#### 9) Intention to obtain condoms

Following Abraham *et al.* (2004) this study will measure intention to obtain condoms with the following two questions: “do you intend to get condoms of your own?” and “do you intend to carry condoms when you go out?” Both items scored on a 5 point scale with a score of 1 indicating strongly do not intend to and 5 indicating strongly intend to.

#### 10) Intention to discuss condoms

Following Abraham *et al.*, (2004) this study will measure intention to communicate about condoms with the following two questions: “do you intend to discuss condoms with your partner before having sex?” and “do you intend to suggest condoms to your partner?” Both items scored on a 5 point scale with a score of 1 indicating strongly do not intend to and 5 indicating strongly intend to.

#### 11) Self-efficacy: condom use skill

The present study will use the mechanics subscale of the condom use self-efficacy questionnaire which refers to technical skills self-efficacy (Brafford & Beck, 1991). This subscale was found to have a Cronbach alpha of 0.78 (Brien, Thombs, Mahoney *et al.*, 1994) and test-retest reliability (two week) of 0.81 (Brafford & Beck, 1991). The mechanics subscale comprises four items:

- 1) I feel confident I could gracefully remove and dispose of a condom when we have intercourse
- 2) I feel confident in my ability to put a condom on myself or my partner
- 3) I feel confident in my ability to put a condom on myself or my partner quickly
- 4) I feel confident that I could use a condom successfully

All items scored on a 5 point scale, with a score of 1 for strongly disagree and 5 for strongly agree.

## 12) Condom communication

Three items will assess this construct for casual partners and two items for steady partners. These items are derived from Krahe *et al.* (2005): “How easy do you think it would be for you to discuss condom use with a casual/steady partner in the next month?” (a score of 1 indicates very difficult and a score of 5 indicates very easy), “How comfortable do you think you’ll be when talking to a casual/steady partner about condoms in the next month?” (a score of 1 indicates very uncomfortable and a score of 5 indicates very comfortable) and “How confident are you in your ability to suggest using condoms to a casual partner in the next month?” (a score of 1 indicates not at all and a score of 5 indicates very much).

## 13) Knowledge of correct condom use, STIs and pregnancy

The questionnaire contains 9 statements asking participants to answer: true, false or do not know. There are 3 items which ask about knowledge of using condoms correctly, (e.g., “It is a good idea to use cooking oil or Vaseline for lubrication when using condoms”), 3 items asking about knowledge of STIs (e.g., “Sexually transmitted infections cannot be transmitted through oral sex”) and 3 items asking about knowledge of pregnancy (e.g., “A woman cannot get pregnant the first time she has sex with a man”). A score of one was awarded for every correct answer, and zero for an incorrect response including a response of do not know.

## Time filling exercises

For early completers, enjoyable puzzles were put at the end of the questionnaire to further occupy participants’ time and interest, thereby reducing the likelihood of communicating with or distracting others, or indicating their level of sexual experience, as recommended by Testa and Coleman (2006). A number of exercises were developed. These included a word search, pop culture quizzes and visual illusions.

## **Piloting the questionnaire**

Piloting the questionnaire took place over 3 stages:

### Stage 1

Following the advice of Testa and Coleman (2006) regarding conducting sexual behaviour research in a school setting, a focus group with eight young people took place to explore the acceptability of the questionnaire among students from

both genders and diverse cultural and religious backgrounds in order to ensure a high response rate by reducing the risk of embarrassing or offending respondents, particularly on sensitive sexual behaviour questions. The researcher explained that the purpose of the discussion was to elicit participants' comprehension and interpretations of questions, rather than their answers to the questions. The group commented on the questionnaire in terms of item wording, item sequence, response formats, appearance and layout. As a result of these discussions, the layout was changed to incorporate more space between the questions so the questionnaire appeared less dense and was 'easier on the eye'. A couple of pictures were also added to make it more visually appealing. The wording of one of the items was changed slightly. Item 33a originally read 'I feel confident I could gracefully remove and dispose of a condom when we have sex', following the mechanics subscale of the condom use self-efficacy questionnaire (Brafford and Beck, 1991). The students felt that they would not use the word 'gracefully' and it was agreed to replace this word with 'successfully'. The young people were also presented with a choice of colourful front covers depicting different images for the questionnaire and were asked to select their favourite.

## Stage 2

A group of 12 students from a local further education college *not* participating in the study and who were in the target age group, were asked to complete the questionnaire under research conditions. This stage of the pilot was to establish face validity, to see whether students completed the questionnaire or left many questions unanswered. It was also used to pilot the materials for the research (including the facilitator script, written consent form and information sheet) and to establish the time needed to complete the questionnaire. Students were introduced to the study as a participant would be under research conditions, for example, the purpose of the study and the confidentiality of the research was explained and participants were asked to sign the written consent form and given an information sheet. It was explained to participants that the results of the questionnaire would not be analysed but that they would be asked for feedback on the questionnaire.

The script took approximately 10 minutes to read through, including time to answer participants' questions. The majority of students took approximately 20 minutes to complete the questionnaire, with the fastest student completing the questionnaire in 15 minutes and the last student finishing just after 30 minutes.

At the end of the session, none of the students reported difficulties with the wording of the questions. After the session, the questionnaires were examined. The majority of questions had acceptable face validity as they were completed by the students. However the format of the attitude scale which used a semantic differential scale created difficulty for some students, so the presentation of this question was amended to increase the spacing between items.

### Stage 3

Following the changes made after stage 2, the questionnaire was completed by 29 students again at the local college, who had not participated in any of the previous pilot stages, under research conditions. The piloting process confirmed that the shortest and longest times to complete the questionnaire were approximately 15 and 35 minutes. Assurance of this timing was instrumental in gaining support from the schools to participate, since the questionnaire could be administered entirely within a routine timetabled class. This version of the questionnaire produced consistent and plausible responses.

Cronbach's alpha was found to be acceptable (above 0.7) for all constructs, apart from self-efficacy and PBC, both of which comprised only two items each. To increase reliability, the number of items for both constructs was increased for the final version of the questionnaire.

### **Developing the format of intervention**

The intervention was piloted with a class at the local college, in order to verify the timings and to observe the intervention protocol 'in action'. When students had viewed the DVD, they participated in a group discussion based on facilitation notes which asked students nine questions about sexual health. The pilot revealed that a standard class period was insufficient time to answer all nine questions. As a result the format of the intervention session was revised so that following the DVD, students were split into groups and given a short questionnaire containing four questions to complete. Following this, the entire group participated in a discussion about the questions they had answered.

## **2.5 Procedure**

Ethical approval for conducting the study was granted from City University.<sup>10</sup> Sessions were arranged with either the personal, social and health education (PSHE) co-ordinator who coordinates sex and relationship education (SRE) for each school or Head of Sixth Form. Schools were initially approached by email and/or telephone and this was followed up by a face-to-face meeting. A school information pack outlining the purpose of the research, what was required from the school and the potential benefits from taking part was developed. This latter part was felt important to gain the schools interest in participating. It was highlighted that external professionals would be responsible for all aspects of the session, thus minimising the burden on teachers and outlining that the required input from teachers was minimal.

The face-to-face meeting provided an opportunity for the school to find out more about the research. The practical aspects of data collection were discussed at the meetings, particularly suitable dates and timetabling. Sessions were conducted in school hours, typically in the first class of the day and were arranged to suit the school. Due to schools having a relatively fixed timetable, a flexible approach to data collection was taken and tailored to each school in terms of dates and at what point in the school day data collection took place. The only stipulations set were that the school had to agree to two sessions, both of which were four weeks apart. The first session had to be a minimum of 40 minutes (for control schools) and 1 hour 30 minutes (for intervention schools). The follow-up session had to be a minimum of 30 minutes.

Health or research professionals collected the data and delivered the interventions, as opposed to teachers, for three reasons: firstly, assurance of confidentiality of sensitive data; secondly, consistency and repeatability of conditions between classes and schools thus improving quality control and reducing reporting bias and thirdly, increasing the likelihood of participation as school staff were not responsible for administration.

Sessions were conducted by a variety of professionals, all of whom had experience in working with young people and/or working in sexual health and/or research. A total of 17 professionals, including the author, were involved in data collection and administration of sessions. Professional backgrounds were as

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<sup>10</sup> Westminster City Council was informed of the research and enquires were made as to whether any procedures were necessary before commencing the research however none were stipulated and ethical approval was thus was not required from the local authority.

follows: school nursing (8), sexual health promotion specialists (5), MSc Health Psychology students (2), community nursing (1) and public health (1). All professionals were employed by Westminster PCT, apart from the two MSc Health Psychology postgraduates who were working for the PCT in a voluntary capacity and held honorary contracts. Professionals were of mixed gender (5 males, 12 females) and ethnic backgrounds. It was necessary to recruit a large number of professionals in order to have sufficient numbers available to cover the number of classes. All professionals were required to attend a training session with the author prior to their involvement. The training focused on the research objectives, ethical considerations, data collection (preparation, completion and administration), the content and delivery of the intervention and dealing with students' queries. Facilitators were given guidelines on how to administer the questionnaires and a sheet which outlined answers for some of the expected questions students may ask. Not all of the professionals were involved in delivering the intervention session; only sexual health practitioners and school nurses, who had experience of delivering sexual health interventions, were asked to deliver the intervention session.

Data collection either took place within tutor groups in individual classrooms or a number of tutor groups together in the school hall, depending on the preference of the school. Within tutor groups, numbers varied but approximately 10-20 students were present in each group. Care was taken to ensure students had as much privacy as was physically possible and where possible desks were set up 'examination style' so students were not seated close together. The number of professionals present depended on the size of the group; groups of between 10-20 students were facilitated by two professionals.

At baseline all classes completed the questionnaire. The intervention group, after receiving the questionnaire, watched the Bedroom Business sexual health documentary and then participated in a discussion about sexual health. The documentary is just under 30 minutes and the discussion was approximately 20 minutes. The control group did not receive the intervention. Follow-up measures (i.e., the same questionnaire completed at baseline) were taken 4 weeks after the experimental condition.

### **Introducing the research to students**

A script was devised for introducing the research that was read aloud to students by the professional responsible for leading the session. The script was developed in order to standardise the information students received, regardless



of the professional delivering the session. The script introduced the sexual health focus of the study and outlined the voluntary and confidential nature of participation and how data would be stored. They were informed that their data would be used to produce a report for City University and Westminster PCT and may also be published. They were told that their names would not be obtained and that none of the information in the reports could lead to the identification of any individual. The script also contained questionnaire administration details and provided an opportunity for students to ask questions. Students were provided with an information sheet to keep. After receiving the information sheet, students were asked to raise their hand if they would prefer not to take part. Students who did not wish to take part either completed private study or went to another suitable place, such as the library. The arrangements for students not wishing to take part was agreed with the school prior to the study commencing. The script, information sheet and written consent form were identical for both the control and the intervention conditions, apart from the materials for the intervention participants clearly stated that participants would be required to take part in a sexual health education session facilitated by professionals.

Students were asked to sign a written consent form, which was collected straightaway afterwards. At this juncture, students were reassured that there was no possibility their written consent form could be matched to their questionnaire.

To encourage honest responding, students were told there were no right or wrong answers and that the purpose of the research was to discover young people's feelings and experiences. It was explained that if they found they had extra time, there were puzzles at the end of the questionnaire to complete. Students were asked not to speak during completion of the questionnaire and to raise their hand if they had any questions.

It was explained to students that the questions asked about using condoms for sex in the next month. It was made clear that their thoughts on these issues were wanted, regardless of whether or not they had had sex. If students were not having sex at the moment or did not have plans to have sex, they were asked to imagine what they would do if they were to have sex in the next month. Students were required to complete a 6 letter sorting code on their questionnaire. The purpose of the sorting code was to match participants' questionnaires at Time 1 and Time 2 in a way that enabled the data of participants to be anonymous. Students were asked to provide the first two letters of the name of their street, the first two letters of their mother's first name

and the first two letters of their father's name. It was stressed to students that they should fill in the sorting code clearly and accurately.

When all students had finished the questionnaire, the lead professional for the session counted the number of questionnaires distributed and returned while students remained seated. After all the questionnaires were completed, participants put their questionnaire in a blank envelope provided and these were collected by the researcher. The author was present at all schools during the times of data collection so that all questionnaires could be collected by hand; at no time were questionnaires returned by post.

### **Procedure for the facilitation of the intervention**

All intervention sessions were delivered in tutor groups of between 10-20 students. Guidance notes were developed outlining the format of the session for facilitators. At the start of the session, it was explained to students that they would watch a sexual health DVD, which would be followed by a group discussion and opportunity to ask questions. Following the screening of the DVD, students were asked to complete a short questionnaire asking three closed ended questions to collect a subjective evaluation of quality assessment. Students were asked "How much did you like the Bedroom Business film?" (a score of 1 indicates not at all and a score of 5 indicates liked very much); "How much did you learn in the session?" (a score of 1 indicates nothing and a score of 5 indicates a lot) and "Would you recommend watching the Bedroom Business film to other young people?" (yes, no or don't know). Students were also asked one open ended question to gather qualitative data, thus providing scope for obtaining feedback on the DVD that would not be captured by the closed ended questions. Students were asked "Please write any comments you have about the Bedroom Business film below, for example, if you liked it or didn't like it, please let us know why".

Following this, the class was split into small groups, of approximately 3 students per group. Each group was given a piece of paper and asked to write down their answers to four questions about sexual health. When students had completed the questions, the facilitator brought the entire class together again and went through each question in turn, asking the groups to give their answers and correcting any inaccuracies. The facilitator had a prompt sheet containing the answers to each question.

### **Procedure for the follow-up session**

Students in both conditions were re-visited again four weeks later to collect the follow-up data. As at the baseline session, the professional leading the session read from a script. Students were told that they would be asked to complete the same questionnaire they completed previously. Students who had not been present at Time 1 were asked to work quietly. Students were reminded that their information was confidential, and that the questionnaires were anonymous. As with the first session, students were given an envelope with which to put their completed questionnaire. At the end of the session, participants were provided with an information sheet with a list of local sexual health services, telephone advice lines and websites for sexual health and personal support services.

### **Content Analysis**

Content analysis (Berg, 1998) was applied to the qualitative data provided from students' responses to the open ended question asking them if they had any comments about the DVD. All comments were typed onto a word processor to ease the following analysis process. Units of analysis were any text (words or sentences) that had been written in the open ended comments section. These meaning units were then grouped into the broad categories of positive or negative valence towards the DVD. The author and another health psychology trainee independently coded all the comments into broad themes and negotiated agreement. Disagreements were resolved through consensus-based discussion. Following the coding into broad themes, using the computer cut and paste functions, similar comments were clustered together. Additional filtering of the data increased the number of categories (sub-themes) within each of the two broad themes. Again this process was carried out independently by the two researchers who through a process of discussion agreed the sub-themes and final analysis.

### **3. RESULTS**

#### **CONTENTS**

|      |  |     |
|------|--|-----|
| 3.1  | Preliminary analysis   | 93  |
| 3.2  | Examining suitability of the data for parametric statistical analysis                                  | 98  |
| 3.3  | Transformation of variables (casual partner items)   | 100 |
| 3.4  | Examining suitability of the data for parametric statistical analysis (steady partner items)           | 102 |
| 3.5  | Transformation of variables (steady partner items)   | 103 |
| 3.6  | Main Analysis  | 103 |
| 3.7  | Comparison of groups at baseline: randomisation check  | 105 |
| 3.8  | Pre-intervention and post-intervention means and standard deviations                                   | 105 |
| 3.9  | Rationale for the use of ANCOVA to examine the effects of the intervention                             | 106 |
| 3.10 | Test of hypothesis: impact of the intervention on cognitive antecedents of condom use (casual partner) | 107 |
| 3.11 | Test of hypothesis: impact of the intervention on cognitive antecedents of condom use (steady partner) | 109 |
| 3.12 | Students Feedback of the Bedroom Business DVD  | 110 |
| 3.13 | Results of the Content Analysis  | 111 |



### **3. RESULTS**

#### **3.1 Preliminary Analysis**

##### **Data screening**

SPSS Version 15 was used for all analysis. Prior to analysis the data was screened for accuracy of input and missing data. For all analyses, cell sizes and degrees of freedom varied because of attrition and missing data.

SPSS frequencies was utilised to provide the mean, standard deviation, maximum and minimum values for each questionnaire item in order identify data input errors. Means and standard deviations were requested to ensure the values were plausible. Maximum and minimum values were requested in order to identify values that were out of range. SPSS missing values analysis was also requested to ensure accurate coding for missing values, to ensure that missing value codes were not read as real data and to identify any instances where no value had been inputted. Screening was carried out systematically for each item and data input errors and missing values corrected where necessary. SPSS frequencies was requested at the end of data cleaning to ensure errors had been rectified.

##### **Items recoded and computation of total scores**

Following screening for data errors, where appropriate items were reversed scored<sup>11</sup>. SPSS syntax was utilised to compute the mean of each of the variables. For example, the variable 'intention to use a condom with a casual partner' comprised of three items (22a, b and c), thus items 22a, b and c, were summed and the mean calculated.

##### **Internal Consistency Reliability**

The internal consistency reliability of each sub-scale was tested by Cronbach's alpha. The Cronbach alpha coefficient of a scale should be above .7 (Kline, 1999). Cronbach's alpha for each subscale at both time 1 and time 2 can be seen in Table B2. The internal consistency of the scales ranged from .74 to .97. The majority of scales have a coefficient alpha of .8 or above. This demonstrates that each scale has very good internal consistency reliability, particularly given they are short scales. The corrected item-total correlations are

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<sup>11</sup> items 19, 21, 24g, 24h, 24i, 24j

the correlations between each item and the total score. Low values (less than .3) are undesirable (Field, 2005; Pallant, 2005); none of the items have a correlation with the total score lower than .3. The alpha if item deleted results give the overall alpha if that item is not included in the calculation. None of the items in the questionnaire would substantially improve reliability if they were deleted, indicating each item contributed to the overall reliability of each scale.

**Table B2. Cronbach's alpha co-efficient for each sub-scale**

| Variable                     | Item Number     | Number of Items | Cronbach's alpha (Time 1) | Cronbach's alpha (Time 2) |
|------------------------------|-----------------|-----------------|---------------------------|---------------------------|
| Intention                    | 22a, b, c       | 3               | .88                       | .95                       |
| Attitude                     | 23a, b, c, d, e | 5               | .84                       | .79                       |
| Behavioural Beliefs          | 24g, h, i, j    | 4               | .83                       | .82                       |
| Perceived Vulnerability      | 25a, b, c       | 3               | .95                       | .97                       |
| Subjective Norm              | 26a, b, c, 28   | 4               | .84                       | .79                       |
| Descriptive Norm             | 27a, b, c       | 3               | .78                       | .80                       |
| PBC                          | 30a, c, d, e    | 4               | .80                       | .82                       |
| Self-efficacy                | 31a, b, d, e    | 4               | .89                       | .91                       |
| Intention to obtain condoms  | 32a, b          | 2               | .74                       | .78                       |
| Intention to discuss condoms | 32c, d          | 2               | .85                       | .83                       |
| Condom use skill             | 33a, b, c, d    | 4               | .93                       | .94                       |
| Communication about condoms  | 34a, c, e       | 3               | .85                       | .88                       |

### **Correlations between the cognitive antecedents of condom use**

Correlations (Spearman's rho<sup>12</sup>) between the variables at baseline are presented in Table B3. For the following analyses, the Bonferroni correction was

<sup>12</sup> A non-parametric test was chosen as data screening indicated the assumption of normality had been violated.

applied in order to reduce the chance of a Type 1 error which may have arisen due to the number of comparisons. The Bonferroni correction involves dividing alpha (i.e., 0.05) by the number of comparisons. The number of comparisons is 13, therefore the Bonferroni adjusted significance value is  $0.05/13 = 0.004$ .

The correlations provide support for the relationships specified by the TPB. Correlations between intention and attitude ( $r = .509$ ), intention and subjective norm ( $r = .429$ ), and intention and PBC ( $r = .335$ ) were all statistically significant ( $p < 0.004$ ). There were also statistically significant correlations ( $p < 0.004$ ) between attitude and subjective norm ( $r = .522$ ), attitude and PBC ( $r = .388$ ) and subjective norm and PBC ( $r = .397$ ).

Interestingly from a theoretical perspective, the correlation between self-efficacy and PBC was the strongest correlation identified ( $r = .622$ ,  $p < 0.004$ ). Also the correlations between self-efficacy and the TPB variables of attitude ( $r = .460$ ), intention ( $r = .357$ ) and subjective norm ( $r = .435$ ) are very similar to those between PBC and the respective variables. This supports the argument that PBC is closely related to Bandura's construct of self-efficacy (Ajzen, 1998; Bandura, 1998).



**Table B3. Correlations between the cognitive antecedents of condom use**

| Variable             | 2.      | 3.      | 4.      | 5.      | 6.      | 7.      | 8.      | 9.      | 10.     | 11.     | 12.     | 13.     |
|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. Intention         | .239*** | .509*** | .271*** | .429*** | .219*** | .335*** | .357*** | .127*   | .316*** | -.002   | .219*** | .052    |
| 2. Belief            |         | .461*** | .188*** | .263*** | .115    | .144*   | .274*** | .127*   | .233*** | .047    | .104    | .173**  |
| 3. Attitude          |         |         | .299*** | .522*** | .304*** | .388*** | .460*** | .159**  | .379*** | .119    | .235*** | .206*** |
| 4. Vulnerability     |         |         |         | .381*** | .195*** | .300*** | .217*** | .155**  | .286*** | -.070   | 1.22*   | -.045   |
| 5. Subjective norm   |         |         |         |         | .515*** | .397*** | .435*** | .204**  | .298*** | .102    | .244*** | .094    |
| 6. Descriptive norm  |         |         |         |         |         | .266*** | .293*** | .194**  | .190**  | .090    | .186*** | -.096   |
| 7. PBC               |         |         |         |         |         |         | .622*** | .179*** | .244*** | .175*** | .317*** | .093    |
| 8. Self-Efficacy     |         |         |         |         |         |         |         | .314*** | .389*** | .249*** | .456*** | .100    |
| 9. Obtain condoms    |         |         |         |         |         |         |         |         | .262*** | .333*** | .320*** | .025    |
| 10. Discuss Condoms  |         |         |         |         |         |         |         |         |         | -.004   | .207**  | .008    |
| 11. Condom use skill |         |         |         |         |         |         |         |         |         |         | .418*** | .179*** |
| 12. Communication    |         |         |         |         |         |         |         |         |         |         |         | .063    |
| 13. Knowledge        |         |         |         |         |         |         |         |         |         |         |         |         |

\* Correlation is significant at the 0.05 level \*\* Correlation is significant at the 0.01 level \*\*\* Correlation is significant at the 0.004 level (two-tailed)

## Missing Data

Missing data should be investigated in terms of its pattern and prevalence (Hair, Anderson, Tatham *et al.*, 1998; Tabachnick & Fidell, 2006). Tabachnick and Fidell (2006) advise not to assume data is missing randomly. SPSS Missing Values Analysis (MVA) is specifically designed to highlight the prevalence and pattern of missing values and was employed in the current analysis.

MVA was utilised to identify cases with a high percentage of missing values. Out of the 149 participants, 10 cases were identified as having 25% or more missing values. Cases were deleted with more than 65% missing values, which resulted in the deletion of 2 cases, leaving a total of 147 cases for analysis. SPSS MVA provides univariate statistics for missing data. SPSS MVA uses Little's MCAR test to examine whether data are missing completely at random (MCAR). Little's MCAR test was not significant ( $X^2(830) = 876.116, p = .130$ ). A statistical nonsignificant result is desired, indicating the probability that the pattern of missing data diverges from randomness is greater than .05, so that MCAR may be inferred.

### Estimating missing data

The default in SPSS is that if a case has a missing value for any of the items then the overall result for that scale is missing. For example, if item 22a had a missing value, no overall total score would be computed for items 22 a, b and c and thus the overall value would be missing. It is common practice to use *mean substitution* whereby each missing value for a variable is replaced with the average of the observed values (Schafer & Graham, 2002). To examine potential loss of data, a dataset was created whereby the mean for the scale was calculated if 50% or more of the items were completed. For example, regarding the scale 'intention', the mean would be calculated if two or more of the three items had a valid response. This made only a marginal increase in the number of cases available for analysis<sup>13</sup>. In addition, the practice of mean substitution reduces the variance of a variable and the correlation of the variable with other variables and thus is not ideal (Schafer & Graham, 2002; Tabachnick & Fidell, 2006). In addition to mean substitution, there are various methods for estimating missing data, with which the researcher "has no single method best suited in every situation, but instead must make a reasoned judgement" (Hair *et al.*, 1998 p.64). Given the relative small amount of missing data in the present

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<sup>13</sup> Approximately four cases. Exact numbers varied for each variable because amount of missing data varied depending on the variable in question.

study, coupled with problems reported about common missing values imputation methods (for example, von Hippel, 2004, report problems regarding biases with the imputation of missing values in SPSS), it was decided to utilise a conservative approach and analyse only complete data.

## **Outliers**

Variables were examined for potential outliers, by calculating z scores and identifying scores in excess of 3.29 ( $p < 0.001$ ), following the value determined by the normal distribution curve.<sup>14</sup>

At time 1, four variables (intention, subjective norm, PBC and self-efficacy) were found to have outliers in excess of 3.29. At time 2, three variables (intention, risk and knowledge) were found to have significant outliers. Closer inspection of the outliers revealed that they were the result of different cases. Deletion of cases was not considered the most desirable option due to all cases being sampled from the desired population (Field, 2005). Transformation of the variables was thus considered and is explored below.

## **3.2 Examining suitability of the data for parametric statistical analysis – tests of assumptions**

### **Assumptions of parametric tests**

Parametric tests require four assumptions to be met:

- 1) Homogeneity of variance
- 2) Normally distributed
- 3) Interval data
- 4) Independence (data from different participants are independent i.e., the behaviour of one participant does not influence the behaviour of another).

The third and fourth assumptions of interval data and independence cannot be tested statistically. The data was measured on a 5 point Likert scale thus satisfying the interval data requirement. There is no reason to suspect the independence requirement was not satisfied.

### **Homogeneity of variance**

Levene's statistic provides a test to examine whether the variances in the group are equal. If Levene's test is significant, (i.e.,  $p < .05$ ) the variances are

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<sup>14</sup> absolute values greater than 1.96 are significant at  $p < .05$ , above 2.58 are significant at  $p < .01$  and absolute values above 3.29 are significant at  $p < .001$  (Field, 2005).

significantly different, therefore, the assumption of homogeneity of variances has been violated. The Levene statistic and p value for all variables can be seen in appendix B5. At time 1, the results of the Levene test showed variances were equal for all variables except perceived vulnerability  $F(1, 141) = 4.408, p < 0.05$  ( $p = .038$ ). At time 2, the results of the Levene test showed variances were equal for all variables except subjective norm  $F(1, 139) = 7.161, p < 0.05$  ( $p = .008$ ) and condom use skill  $F(1, 142) = 5.362, p < 0.05$  ( $p = .022$ ).

Field (2005) cautions when the sample size is large, small differences in group variances can produce a Levene's test that is significant and recommends examining the variance ratio.<sup>15</sup> If it is less than 2, then it is safe to assume homogeneity of variance (Field, 2005). The variance ratios for the variables with a significant Levene's test (perceived vulnerability, subjective norm and condom use skill) can be seen in Table B4.

**Table B4 Variance ratios for variables with a significant Levene test**

| Variable                | Intervention<br>(variance) | Control<br>(variance) | Variance<br>Ratio |
|-------------------------|----------------------------|-----------------------|-------------------|
| Condom use skill        | 1.479                      | 0.991                 | 1.49              |
| Perceived vulnerability | 0.472                      | 1.188                 | 2.52              |
| Subjective norm         | 0.724                      | 0.345                 | 2.10              |

The variance ratios suggest that the assumption of homogeneity of variances has been violated for subjective norm and perceived vulnerability, but not for condom use skill.

### Normality

Two components of normality are skewness and kurtosis. Skewness concerns the symmetry of the distribution, while kurtosis concerns the peakedness of a distribution. The values of skewness and kurtosis should be zero in a normal distribution.

The Kolmogorov-Smirnov test provides a test for normality. If significant ( $p < .05$ ), then the distribution is significantly different from a normal distribution. However this test is too sensitive for larger samples. It is more important to look at the shape of the distribution visually and the values of skewness and kurtosis (Field, 2005; Tabachnick & Fidell, 2006).

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<sup>15</sup> This is the ratio of the variances between the group with the biggest variance and the group with the smallest variance, i.e., take the highest value and divide by the smallest.

As the analysis involves comparing groups, the following examinations of the data were made for both the control and intervention conditions independently (Field, 2005). The normal distribution of variables at time 1 and time 2 for both the intervention and control groups were inspected using histograms and the values of skewness and kurtosis. These values are provided by SPSS but need to be converted into a z-score to standardise them. The z-scores for skewness and kurtosis were calculated using the relevant equation.<sup>16</sup> Any variable with a z-score in excess of 3.29 ( $p < 0.001$ ) was considered to be significantly non-normal. The values of skewness and kurtosis and their respective z-scores can be seen in appendix B5.

A number of variables were found to have a z-score in excess of 3.29 for skewness and/or kurtosis in both the intervention (intention, attitude, perceived vulnerability, PBC, self-efficacy, intention to discuss condoms, subjective norm and knowledge) and control (intention, attitude, perceived vulnerability, subjective norm, self-efficacy, intention to discuss condoms, condom use skill, knowledge) groups. Inspection of histograms (not presented) showed variables tended to display negative skew with a pile up of scores on the right, indicating participants tended to respond at the higher end of the scale.

### **3.3 Transformation of variables (casual partner items)**

Data screening revealed a number of parametric assumptions had been violated. Following recommendations of Tabachnick and Fidell (2006) and Field (2005), transformation of the variables was considered the most appropriate step.

Transformations were applied to the following variables: intention, attitude, perceived vulnerability, subjective norm, PBC, self-efficacy, intention to discuss using condoms, condom use skill and knowledge. A number of mathematical transformations for data with negative skew were applied (reflect and square root; reflect and logarithm; reflect and inverse) to ascertain which, if any, created a more agreeable outcome. Reflect and inverse<sup>17</sup> created the most satisfactory outcome for all variables, except knowledge, where reflect and square root<sup>18</sup> created the most satisfactory outcome. In each case where a transformation

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<sup>16</sup>  $Z_{\text{skewness}} = \frac{\text{Skewness} - 0}{\text{Standard error skewness}}$

$Z_{\text{kurtosis}} = \frac{\text{Kurtosis} - 0}{\text{Standard error kurtosis}}$

<sup>17</sup> Reflect and inverse (formula: new variable =  $1 / (K - X)$ , where K = largest possible value + 1 and X = original variable); in this instance K = 6

<sup>18</sup> Reflect and square root (formula: new variable =  $\text{SQRT}(K - X)$ , where k = largest possible value + 1 and X = original variable) in this instance K = 10

was applied to the time 1 variable, the same transformation was applied to the time 2 variable.

### Outliers

Following transformation there were no longer significant outliers for any of the variables.

### Homogeneity of variance

Levene's test for homogeneity of variance revealed the assumption had not been broken for any of the transformed variables at Time 1. However at time 2, the following reached significance: attitude  $F(1, 140) = 4.772, p < 0.05$  ( $p = 0.031$ ), perceived vulnerability  $F(1, 143) = 4.017, p < 0.05$  ( $p = 0.047$ ) and subjective norm  $F(1, 139) = 4.008, p < 0.05$  ( $p = 0.047$ ).

As stated previously however, if the variance ratio is less than 2, then it is safe to assume homogeneity of variance (Field, 2005). The variance ratios for the transformed variables are presented in Table B5.

**Table B5. Variance ratios for variables after transformation with a significant Levene test**

| Variable                | Intervention (variance) | Control (variance) | Variance Ratio |
|-------------------------|-------------------------|--------------------|----------------|
| Attitude                | .064                    | .052               | 1.2            |
| Perceived Vulnerability | .086                    | .067               | 1.3            |
| Subjective norm         | .076                    | .052               | 1.5            |

The variance ratio's are all below 2 and demonstrate homogeneity of variance significantly improved following transformation.<sup>19</sup>

### Normality

Following transformation, z-scores were calculated for both skewness and kurtosis. As can be seen in appendix B6, z-scores were much improved. Prior to transformation, 8 variables had significant skewness and/or kurtosis. After transformation, this reduced to 3 variables. Whilst this is still of concern, as Pallant (2005, p.198) states, "most of the [statistical] techniques are reasonably

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<sup>19</sup> In addition, Pallant (2005) states that analysis of variance is reasonably robust to violations of the homogeneity of variance assumption, provided the size of your groups is reasonably similar (e.g., largest/smallest = 1.5; Stevens, 1996). This is the case in the present study (sample size of the intervention condition ( $n = 61$ ) and the control condition ( $n = 86$ ) is  $86/61 = 1.4$ ).

'robust' or tolerant of violations of this assumption [of normality]...with large enough samples, (e.g., 30+) (see discussion of this in Gravetter & Wallnau, 2000 p.302; Stevens, 1996 p.242)".

### **3.4 Examining suitability of the data for parametric statistical analysis (steady partner items)**

The majority of the items in the questionnaire enquired about condom use with a casual partner. However seven variables contained items that specifically enquired about condom use in regards to sex with a steady partner. These were intention (item 22 d), attitude (item 23f), subjective norm (items 26d, 29), descriptive norm (item 27d), PBC (item 30b), self-efficacy (item 31c) and communication about condoms (items 34b and 34d).

#### **Outliers**

At time 1, four variables were found to have one outlier in excess of 3.29 (attitude, PBC, self-efficacy and communication about condoms). At time 2, three variables were found to have one outlier in excess of 3.29 (PBC, self-efficacy and communication about condoms).

#### **Homogeneity of variance**

The Levene statistic and relevant p values for all variables can be seen in appendix B7. At time 1 the Levene test was significant for intention  $F(1, 125) = 5.890$ ,  $p < 0.05$  ( $p = .017$ ), attitude  $F(1, 125) = 8.560$ ,  $p < 0.05$  ( $p = .004$ ), PBC  $F(1, 125) = 9.083$ ,  $p < 0.05$  ( $p = .003$ ) and self-efficacy  $F(1, 125) = 10.506$ ,  $p < 0.05$  ( $p = .002$ ). At time 2 the Levene test was significant only for PBC,  $F(1, 129) = 9.467$ ,  $p < 0.05$  ( $p = .003$ ).

#### **Normality**

The values of skewness and kurtosis and their respective z-scores can be seen in appendix B7. At time 1, a number of variables were found to have a z-score in excess of 3.29 for skewness and/or kurtosis in both the intervention condition (intention, PBC, self-efficacy) and control condition (intention, attitude, PBC, self-efficacy, subjective norm and communication about condoms). At time 2, the following variables had z-scores in excess of 3.29: intervention condition (attitude, PBC, subjective norm) and control condition (intention, attitude, PBC, self-efficacy, subjective norm and communication about condoms).

### **3.5 Transformation of variables (steady partner items)**

Data screening of variables thus revealed a number of parametric assumptions had been violated. Preliminary data analysis suggested all steady partner items, besides descriptive norm, should be transformed. Following the pattern for the casual partner variables, reflect and inverse transformation created the most satisfactory outcome.

#### **Outliers**

Following transformation there were no longer any significant outliers.

#### **Normality**

Following transformation, the normal distribution of variables was much improved. Prior to transformation, six variables had a z-score in excess of 3.29 for skewness and/or kurtosis. Following transformation, all z-scores were below 3.29, apart from intention in the control group at time 1, which was just above this figure (-3.62). The values for all variables can be seen in appendix B8.

#### **Homogeneity of variance**

When transformed, the Levene statistic was not found to be significant for any of the variables, indicating the homogeneity of variance assumption was now satisfied (see appendix B8).

### **3.6 Main analysis**

#### **Analysis of Attrition**

As the research was carried out in schools with high rates of absenteeism, analysis of attrition rates (whether a participant had scores for both Time 1 and Time 2) was conducted. Of the 306 participants who completed measures at Time 1, 149 completed measures at Time 2, indicating attrition of 157 participants (51%). To examine whether there were differences between those participants who were present at both time 1 and time 2 with those who were only present at time 1, a one-way between-groups multivariate analysis of variance (MANOVA) was carried out. The thirteen dependent variables were the baseline cognitive antecedents of condom use, and the independent variable was presence or absence at time 2.



### **Assumptions of MANOVA**

The assumptions of MANOVA regarding normality, linearity and univariate outliers had already been examined and transformations performed where necessary (see above). MANOVA has additional assumptions concerning multivariate normality, multicollinearity and homogeneity of variance-covariance matrices.

#### Multivariate normality

Multivariate normality can be examined through the calculation of Mahalanobis distance. This is the distance of a particular case from the centroid of the remaining cases, where the centroid is the point created by the means of all the variables (Tabachnick & Fidell, 2001). Whether or not a case is considered to be an outlier is examined using a critical value. The critical value is determined by using critical values of chi-square, with the number of dependent variables as the degrees of freedom value. In this instance, the maximum mahalanobis distance was computed to be 41.091. The critical value for 13 dependent variables is 34.528 ( $\alpha = .001$ ). Thus, the maximum value for Mahalanobis Distance is greater than the critical value, suggesting the presence of multivariate outliers. Further investigation identified one case with a Mahalanobis Distance of 41.091. The next highest case had a Mahalanobis Distance of 31.650. As one case had a value which exceeded the critical value quite substantially, it was deleted.

#### Multicollinearity

Inspection of the correlation matrix for all the dependent variables revealed the presence of moderate correlations, but none greater than .5, establishing multicollinearity was not present.

#### Homogeneity of variance-covariance matrices

Box's test of Equality of Covariance Matrices was not significant  $F(91, 123662) = 1.134, p > .05$ , indicating this assumption had not been violated.

### **Results**

Results of the multivariate test found there was not a statistically significant difference between participants who were present at time 1 and time 2 compared with those who were present only at time 1:  $F(13, 191) = p > .05$ , Wilks' Lambda = .918,

### **3.7 Comparison of groups at baseline: randomisation check**

To see if any differences existed between the two conditions at baseline, a one-way between-groups multivariate analysis of variance (MANOVA) was carried out. The thirteen dependent variables were used, and the independent variable was condition (intervention or control).

#### **Assumptions of MANOVA**

##### **Multivariate outliers**

The maximum mahalanobis distance was 34.687 and is just greater than the critical value of 34.528, suggesting the presence of multivariate outliers. Further investigation identified only one case (ID = 34) exceeded the critical value. Following Pallant (2005), as this one case just exceeded the critical value, it was retained.

##### **Multicollinearity**

Inspection of the correlation matrix for all dependent variables revealed the presence of moderate correlations, but none greater than .5, establishing multicollinearity was not present.

##### **Homogeneity of variance-covariance matrices**

Box's test of Equality of Covariance Matrices was not significant  $F(91, 24111) = 1.142, p > .05$ , indicating this assumption had not been violated.

#### **Results**

Results of the multivariate test found there was not a statistically significant difference between participants in the intervention condition and control condition on the combined dependent variables at baseline:  $F(13, 96) = p > .05$ , Wilks' Lambda = .805.

### **3.8 Pre-intervention and post-intervention means and standard deviations**

Table B6 shows pre-intervention (i.e., baseline) and post-intervention (i.e., 4 week follow-up) mean scores and standard deviations for the cognitive antecedents of condom use for both control and intervention groups. Examination of the pre-intervention means shows that they are notably high. This suggests participants were generally favourable towards using condoms before watching the DVD and thus presents a challenge for the intervention.

**Table B6. Pre-intervention and post-intervention means and standard deviations**

| Variable             | Pre – Intervention Scores |      |              |      | Post-Intervention Scores |      |              |      |
|----------------------|---------------------------|------|--------------|------|--------------------------|------|--------------|------|
|                      | Control                   |      | Intervention |      | Control                  |      | Intervention |      |
|                      | Mean                      | SD   | Mean         | SD   | Mean                     | SD   | Mean         | SD   |
| Intention            | 4.65                      | .69  | 4.64         | .70  | 4.54                     | 1.00 | 4.35         | 1.10 |
| Attitude             | 4.37                      | .64  | 4.25         | .80  | 4.40                     | 0.60 | 4.42         | 0.62 |
| Belief               | 3.40                      | .91  | 3.22         | 1.07 | 3.28                     | 0.99 | 3.29         | 1.02 |
| Vulnerability        | 4.35                      | 1.09 | 4.45         | .70  | 4.55                     | 0.88 | 4.35         | 0.94 |
| Subjective norm      | 4.28                      | .86  | 4.39         | .66  | 4.42                     | 0.59 | 4.25         | 0.86 |
| Descriptive norm     | 3.40                      | 1.01 | 3.61         | .86  | 3.69                     | 0.91 | 3.59         | 0.90 |
| PBC                  | 4.24                      | .74  | 4.11         | .87  | 4.30                     | 0.74 | 4.12         | 0.84 |
| Self-efficacy        | 4.15                      | .77  | 4.17         | .90  | 4.23                     | 0.84 | 4.20         | 0.82 |
| Intention to obtain  | 3.75                      | 1.10 | 3.72         | 1.19 | 3.79                     | 1.25 | 3.50         | 1.25 |
| Intention to discuss | 3.92                      | 1.20 | 3.60         | 1.30 | 3.97                     | 1.15 | 3.85         | 1.16 |
| Condom use skill     | 3.83                      | 1.07 | 3.85         | 1.28 | 4.10                     | 0.99 | 3.76         | 1.20 |
| Condom communication | 3.69                      | .95  | 3.86         | .95  | 3.86                     | 0.90 | 3.91         | 0.99 |
| Knowledge            | 6.61                      | 1.80 | 5.35         | 2.01 | 4.86                     | 1.26 | 4.44         | 1.30 |

### **3.9 Rationale for the use of ANCOVA to examine the effects of the intervention**

Despite the MANOVA revealing there were no statistically significant differences between the two conditions at baseline, to control for baseline differences between the experimental conditions, a series of univariate between group analyses of covariance (ANCOVA) were used to compare the intervention and control condition, using baseline scores as covariates. This method allows the comparison of each post-intervention outcome measure across conditions while controlling for differences on the same measure, across conditions, at baseline. ANCOVA is thus very useful in situations such as this, where only small to medium effect sizes are expected and with a relatively small sample, as it reduces within-group error variance (Field, 2005; Pallant, 2005). It is common in studies evaluating the effectiveness of safer sex interventions (e.g., Bryan, Aiken, & West, 1996; Downs *et al.*, 2004; Kalichman *et al.*, 1999; Krahe *et al.*, 2005; Ploem & Byers, 1997; Sanderson, 1999; Sanderson & Yopyk, 2007; Torabi *et al.*, 2000).

### **Assumptions of ANCOVA**

In addition to the assumptions of parametric tests, ANCOVA has the following additional assumptions<sup>20</sup>:

<sup>20</sup> An additional assumption is that if there are multiple covariates they should not be strongly correlated with one another. However as there is only one covariate for each dependent variable in this study, this assumption is not applicable here.

1. The covariate is measured prior to the intervention or experimental manipulation. This assumption is not tested statistically but is a feature of the design of the study. In this case the time 1 scores are the covariates and as such were taken prior to the intervention.
2. Reliability of covariates (the covariate is measured without error or as reliably as possible). This assumption can be examined by considering the Cronbach alpha's (Pallant, 2005). As shown in Table B2, each scale had a Cronbach's alpha of .70 or higher so this assumption can be considered to be met.
3. Linearity (the relationship between the dependent variable and the covariate for all groups is linear). This assumption was examined using scatterplots (not presented); none of the scatterplots appeared to have a curvilinear relationship and there was no evidence to suggest the assumption of linearity was violated.
4. Homogeneity of regression slopes (the relationship between the covariate and the dependent variable is the same for each of the groups). It is assumed that the regression slope between the covariate and the dependent variable is the same (homogenous) across the levels of the factor (in this case the intervention or control condition). Violation of the homogeneity of regression assumption indicates an interaction effect between the covariate and the factor. A significant interaction indicates that the assumption of homogeneity of regression coefficients has been violated. The homogeneity of regression assumption was examined for each of the dependent variables. For all variables the interaction between the intervention condition and the covariate was not significant ( $p > .05$ ), thus the homogeneity of regression assumption was not violated.

### **3.10 Test of hypothesis: impact of the intervention on cognitive antecedents of condom use (casual partner)**

Table B7 presents means at follow up, adjusted for baseline differences. For the following analyses, the Bonferroni correction was applied in order to reduce the chance of a Type 1 error which may have arisen due to the number of statistical tests employed. The Bonferroni correction involves dividing alpha (i.e., 0.05) by the number of comparisons. The number of tests is 13, therefore the Bonferroni

adjusted significance values is  $0.05/13 = 0.004^{21}$ . After adjusting for pre-intervention scores, there were no statistically significant differences between the intervention and control groups on post-intervention scores.

**Table B7. ANCOVA RESULTS: Differences in dependent variables (casual partner) at one month follow up (means presented are marginal means adjusted for baseline scores)**

| Variable                      | Control | Intervention | F    | P value | N   |
|-------------------------------|---------|--------------|------|---------|-----|
| Intention†                    | 0.84    | 0.80         | 0.67 | .416    | 127 |
| Attitude†                     | 0.70    | 0.74         | 1.84 | .177    | 137 |
| Belief                        | 3.21    | 3.36         | 0.98 | .324    | 134 |
| Risk†                         | 0.82    | 0.77         | 1.92 | .170    | 142 |
| Subjective Norm†              | 0.73    | 0.69         | 0.94 | .333    | 137 |
| Descriptive Norm              | 3.70    | 3.54         | 1.32 | .252    | 140 |
| PBC†                          | 0.69    | 0.65         | 0.96 | .328    | 140 |
| Self-efficacy†                | 0.69    | 0.67         | 0.19 | .665    | 137 |
| Intention to obtain condoms   | 3.81    | 3.47         | 4.48 | .036    | 141 |
| Intention to discuss condoms† | 0.63    | 0.64         | 0.06 | .807    | 140 |
| Condom use skill†             | 0.67    | 0.58         | 4.56 | .035    | 138 |
| Condom communication          | 3.88    | 3.86         | 0.02 | .877    | 133 |
| Knowledge†                    | 1.41    | 1.57         | 0.01 | .920    | 135 |

**Notes:**

† = transformed variable

F = F statistic from ANCOVA

N = Number of participants

**Post hoc analysis**

The mean scores for both conditions at baseline were noticeable high (ranging from 3.40 to 4.65 in the control group and from 3.60 to 4.64 in the intervention group). To examine the possibility of a “ceiling effect”, the ANCOVAs on the post-intervention and follow-up scores were repeated, using only those respondents who scored below the mean on the respective measures (this technique was reported by Krahe *et al.*). The results again showed no statistically significant differences between conditions. However close inspection of the data revealed respondents’ scores were still above the midpoint in all but

<sup>21</sup> It is acknowledged that Bonferroni’s Correction tends to be “too strict when lots of tests are performed” (Field, 2005, p.725) and that there is some debate amongst researchers about whether or not the significance level should be adjusted if multiple measures are used (see Feise, 2002; Perneger, 1998); a conservative approach was adopted here.

two of the scales and participants numbers were substantially reduced in all instances, thus reducing statistical power to detect a difference if one was present<sup>22</sup>.

### **3.11 Test of hypothesis: impact of the intervention on cognitive antecedents of condom use (steady partner)**

Table B8 presents means at follow up adjusted for baseline differences for the items regarding condom use with a steady partner. After adjusting for pre-intervention scores, the ANCOVAs reveal there were no statistically significant differences at follow-up for any of the variables ( $p > 0.007$ ).<sup>23</sup>

**Table B8. ANCOVA RESULTS: Differences in dependent variables (steady partner) at one month follow up (means presented are marginal means adjusted for baseline scores)**

| Variable             | Control | Intervention | F    | P value | N   |
|----------------------|---------|--------------|------|---------|-----|
| Intention†           | 0.72    | 0.73         | 0.29 | 0.864   | 136 |
| Attitude†            | 0.75    | 0.78         | 0.4  | 0.511   | 142 |
| Subjective Norm†     | 0.62    | 0.66         | 0.85 | 0.359   | 137 |
| Descriptive Norm     | 3.60    | 3.57         | 0.02 | 0.890   | 141 |
| PBC†                 | 0.76    | 0.77         | 0.08 | 0.772   | 143 |
| Self-efficacy†       | 0.77    | 0.71         | 1.72 | 0.192   | 140 |
| Condom communication | 0.73    | 0.67         | 1.52 | 0.219   | 135 |

**Notes:**

† = transformed variable

F = F statistic from ANCOVA

N = Number of participants

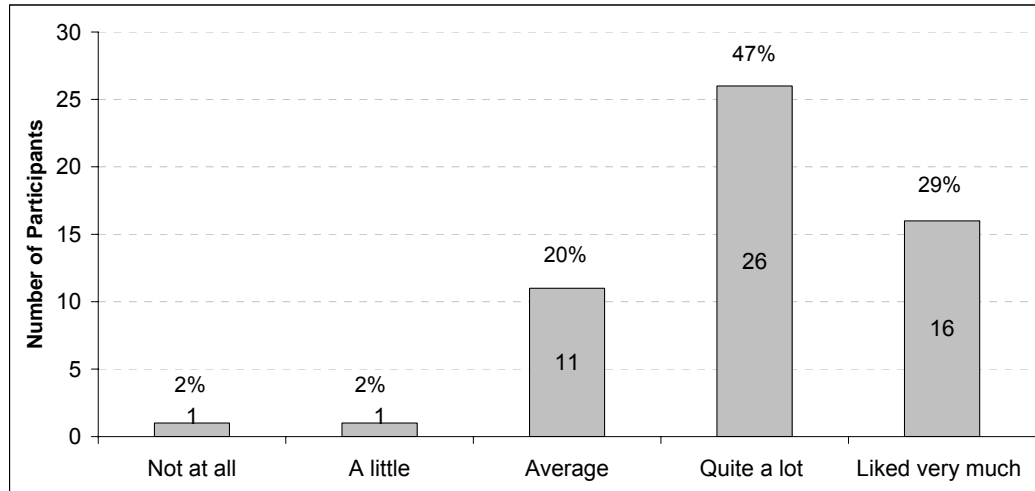
<sup>22</sup> The most severe case was for the measure intention to use condoms, where respondent numbers were reduced from 127 to 29.

<sup>23</sup> Using Bonferroni's adjustment,  $0.05/7 = 0.007$ .

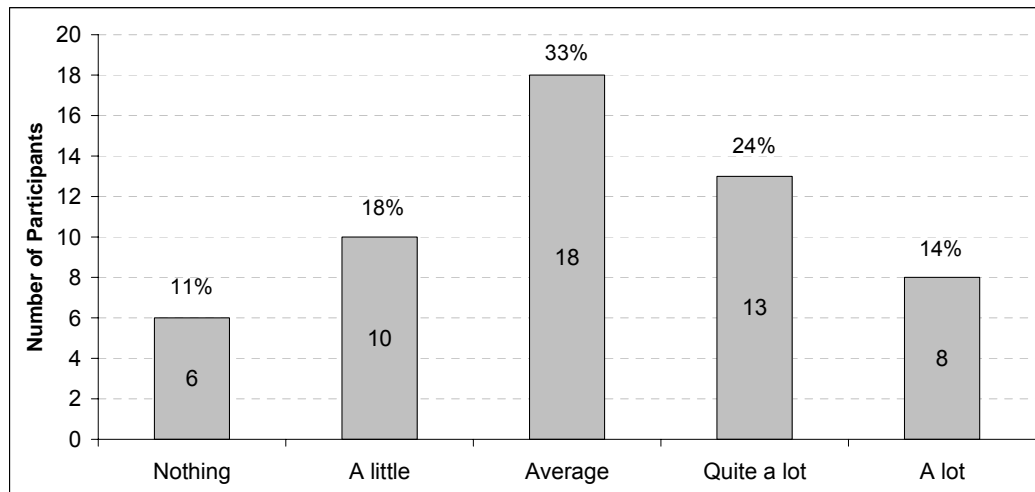
### **3.12 Students' Feedback of the Bedroom Business DVD**

Students' responses to the questions asking them to provide feedback on the DVD are presented below. The quantitative data is presented first, followed by the qualitative data. In the Figures below, both the raw data and percentages are presented.

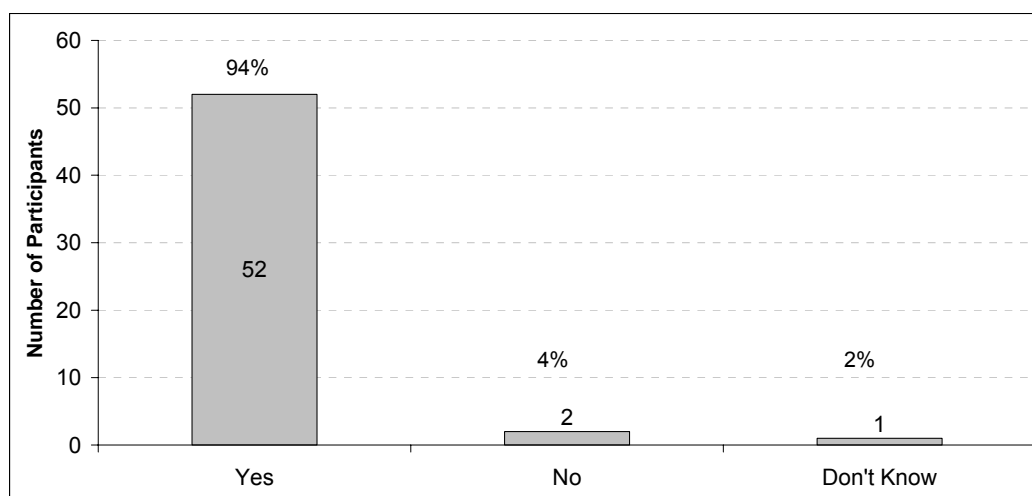
**Figure B2. Responses to "How much do you like the Bedroom Business film?"**



**Figure B3. Responses to "How much did you learn in the session?"**



**Figure B4 Responses to “Would you recommend watching the Bedroom Business film to other young people?”**



### **3.13 Results of the Content Analysis**

The broad themes of positive or negative valence towards the DVD and sub-themes constitute the results of the content analysis. Frequency counts were compiled of the number of comments in each category and are presented in Table B9. 108 young people gave comments about the DVD<sup>24</sup>. Their comments have been categorised under two headings: positive comments and negative comments. The majority of comments were positive, with 84 young people making positive comments and 24 young people making negative comments. The number in brackets in Table B9 indicates the number of young people making a comment in that category.

In the following section, quotes are used to illustrate each of the themes. This has been described as “grounding in examples” (Elliott, Constance, & Rennie, 1999, p. 223). Care has been taken to support the themes with written comments from participants. These provide a mechanism for validation of the analysis, providing the reader the opportunity to evaluate for themselves the interpretation. The gender of the person providing the quotation is indicated at the end of the sentence by letter, i.e., G = girl and B = boy.

<sup>24</sup> All comments from students who saw the DVD were analysed, not just those who were present at follow-up.



**Table B9. Results of the Content Analysis**

- **Positive comments (84):**

- 1) *Generic positive comments (20)*
- 2) *The DVD is educational (31)*
  - i) *General Comments*
  - ii) *DVD highlights the importance of safe sex and potential consequences of unsafe sex*
  - iii) *DVD provides information on STIs*
- 3) *The DVD is good because it uses young people and relates to young people (14)*
- 4) *The music in the DVD was good (12)*
- 5) *The DVD was good because it used local people and was filmed in the local area (4)*
- 6) *Would like to participate in something similar (3)*

- **Negative comments (24):**

- 1) *Generic negative comments (4)*
- 2) *The DVD should have provided more detailed information about sexual health (13)*
- 3) *The DVD is not inclusive to all young people (6)*
- 4) *The DVD had poor sound and pictures (1)*

## Positive Comments

### 1) Generic positive comments

20 young people gave non-specific positive comments about the DVD (11 boys, 7 girls and 2 gender unknown). Typical comments were:

*'Interesting, useful' (B)*

*'I liked it very much, it gives you idea what to do next' (G)*

*'Really enjoyed watching the film' (G)*

Some young people provided more detail, for example,

*'Wasn't being patronising, or telling me what to do, left me to make up my mind –*

*NICE!!!' (G)*

*'I love it. Excellent awareness action to young people' (B).*

*'The film can attract a lot of the youth's attention as it is appealing in its self' (G)*

A couple of young people specifically said that the DVD should be shown to everyone, for example,

*'The Bedroom Business should be shown to all young people and make more just like it'*

*(B)*

### 2) The DVD is educational

31 young people made comments about the educational nature of the film. These comments have been divided into 3 sub-categories:

#### i) General Comments (18 young people)

18 young people gave positive comments around the educational nature of the DVD (8 Boys, 8 Girls and 2 gender unknown). The comments were either that they themselves had learnt something from watching the film, or felt that young people in general would be more informed having seen it. Typical comments were:

*'I liked it very much because it tells us the youth what's going on these days and what we can do to improve it' (G)*

*'Great way to reach the younger people, it will give them a better understanding' (B)*

*'Was good, very educational' (B)*

*'I really like the "bedroom business" film. Learn quite a lot from this' (G)*

ii) DVD highlights the importance of safe sex and potential consequences of unsafe sex (8 young people)

8 (5 boys, 3 girls) young people made comments specifically about how the DVD provided information about safe sex and consequences of unsafe sex, such as:

*'I liked it because it's showing us how to be protected' (B)*

*'Have more insight into safe sex is very crucial in young people/teens' (B)*

*'I liked the DVD because it really brings out the important points about having safe sex!'*  
(B)

*'It will definitely make it easier for younger people to discuss/learn more about safe sex'*  
(G)

iii) DVD provides information on STIs (5 young people)

5 (2 boys, 3 girls) young people made comments specifically regarding how the DVD provided information concerning STIs,

*'I liked it because sex is fun and we know it is pleasure, but what can happen next AIDS/HIV then what it could lead to death and I learnt in this video' (B)*

*'There was a lot of information for those who may not know about STIs' (G)*

*'I liked it as it made me realise that I should take more care of sexual transmitted infections and go and check myself out' (G)*

### 3) The DVD is good because it uses young people and relates to young people

14 young people stated that they liked the DVD because they could relate to it as it featured young people (5 boys and 9 girls). Below is a selection of typical comments:

*'I really enjoyed it especially because it was promoted by people of my age and it explains things rather than saying 'don't do it!'' (G)*

*'I liked that the film related to my age group' (G)*

*'Pleased our age promoting it, instead of old teachers, etc' (G)*

*'I liked the video; it appealed to what most youths are associated now' (G)*

*'I thought it was very informative and full of useful information. The fact that it was set up by young people is what makes it more appealing to the younger generation' (G)*

*'I liked the film because the producers are using young people to address the message to other young people' (B)*

*'Gets the message to young people from young people very effective technique, includes everyday people's opinion from different backgrounds' (G)*

#### 4) The music in the DVD was good

12 young people made a positive comment about the music in the DVD (5 Boys, 5 Girl, 2 gender unknown). Comments included that they liked the music and also that music was a good medium to inform young people about the safer sex message. A selection of comments is presented below:

*'I liked the RAP about STDs' (B)*

*'It was a good way to make young people aware of STIs, music does get across' (G)*

*'Music was good' (G)*

*'I think it was interesting because I have never heard a song about STIs/STDs' (gender unknown)*

*'I liked the way they used music to reach out to the public, which is something I probably would be interested in taking part in' (B)*

*'I liked the pop music, and I thought was a good way to get the message across' (G)*

*'This song needs to be played on radio & music channels. It'll get the message across' (G)*

#### 5) The DVD was good because it used local people and was filmed in the local area

4 girls commented that they liked the fact the DVD included local young people and was filmed in the local area. For example, comments included:

*'I knew the majority of the people. It was good and funny' (G)*

*'It was good because it was filmed totally with local people I knew' (G)*

*'I liked seeing my area in the DVD' (G)*

#### 6) Would like to participate in something similar

3 young people (1 boy, 2 gender unknown) commented that they would like to contribute by participating in something similar.

*'It was good, I would like to make a say next time' (B)*

*'Graffiti writers were good. NHS should ask me next time' (gender unknown).*

### **Negative Comments**

#### 1) Non-specific negative comments

4 boys gave generic negative comments about the DVD:

*'I didn't like it at all' (B)*

*'Very boring, didn't appeal to me' (B)*

## 2) DVD should have provided more detailed information about sexual health

13 young people (7 girls, 6 boys) commented that the DVD was not very informative and should have provided more detailed information about sexual health. For example, comments were:

*'It would be better if the diseases were discussed in more detail' (G)*

*'It didn't really show anything new, it regurgitated the information we already knew at post 16' (G)*

*'They should of gone into depth more about the STDs' (G)*

*'I liked the film, but they showed what I already knew' (B)*

*'It gave a lot of good information but most of it I already knew' (G)*

*'It was useful but there should have been more direct information about safe sex, free information about sex and the facts about STDs as well as the influences that young people have' (G)*

*'It was ok, needs more information about what can happen to you when you get a STD' (G)*

*'I liked it, but it was not very informative' (B)*

## 3) The DVD is not inclusive to all young people

6 young people (4 boys and 2 girls) felt that the DVD was not inclusive to all young people. Some young people commented that the music did not appeal to everyone. Comments included:

*'Only targeted one sector of young people, the RAP music culture does not appeal to everyone, too much focus on hip hop' (G)*

*'The whole film involved ethnic minorities and didn't seem to be aimed at White people!' (B)*

*'The film wasn't targeted at everyone, not every teenager is Ghetto' (B)*

*'It was good, however not all young people understand RAP music, different languages maybe needed' (B)*

## 4) DVD had poor sound and pictures

1 girl stated that the quality of the DVD meant it was difficult to hear everything. Her comment was:

*'The sound and pictures at some points were poor, so you couldn't hear everything which was said' (G)*

## **4. DISCUSSION**

### **CONTENTS**

|      |  |     |
|------|--|-----|
| 4.1  | Summary of results   | 119 |
| 4.2  | Quantitative and Qualitative feedback of the DVD                             | 122 |
| 4.3  | Sample characteristics   | 124 |
| 4.4  | Consideration of findings in relation to previous literature                 | 125 |
| 4.5  | Strengths of the intervention  | 127 |
| 4.6  | Limitations of the intervention  | 129 |
| 4.7  | Strengths of the research design   | 134 |
| 4.8  | Limitations of the research design   | 136 |
| 4.9  | Methodological Issues  | 137 |
| 4.10 | Future research  | 141 |
| 4.11 | Diversity  | 143 |
| 4.12 | Limitations of social cognition models in explaining sexual health behaviour | 149 |
| 4.13 | Current sex and relationships education in schools                           | 153 |
| 4.14 | Conclusion   | 154 |



## **4. DISCUSSION**

### **4.1 Summary of results**

Although videos have been recommended for use in schools and are used for sexual health education, they are rarely subjected to rigorous evaluation. The aim of this experimental study was to evaluate the effectiveness of a DVD in promoting cognitive antecedents of condom use compared to a no intervention control, utilising a robust randomised design.

Results showed that the intervention did not change any of the 13 cognitive predictors of condom use in participants four weeks after viewing the DVD, and therefore that in this study, a brief intervention utilising film media was not sufficient to change the pre-cursors of behaviour.

As demonstrated in the introduction, research has shown that HIV/STI interventions can be effective in reducing sexual risk behaviour in young people (Jemmott & Jemmott, 2000; Johnson *et al.*, 2003; Kirby *et al.*, 2007; Mullen *et al.*, 2002; Pedlow & Carey, 2003). Research has also demonstrated that the effect of interventions on behavioural outcomes are larger when interventions influence conceptual mediators, such as self-efficacy and beliefs about the consequences of condom use for sexual enjoyment, as compared to interventions that do not influence conceptual mediators (Jemmott & Jemmott, 2000). Thus targeting conceptual mediators in intervention materials is likely to result in effective interventions (Krahe *et al.*, 2005; Sheeran *et al.*, 1999). Although it is not known from the current study whether the intervention would have demonstrated an effect on behavioural outcomes, this seems unlikely given that it was unable to produce an effect on any of the cognitive antecedents of condom use.

#### **Ceiling effect**

One possible explanation for the failure of the intervention to promote the cognitive antecedents of condom use relative to the control condition, could be the very high mean scores in both conditions at baseline, leaving little room for improvement and suggesting a ceiling effect. Means for all variables were above the mid-point of the scale, indicating overall the sample were favourable towards condoms. Inspection of the data showed a number of variables were negatively skewed, showing responses were heavily weighted at the higher end of the scale. Thus the analysis was compromised to some extent by a lack of variability in responses at baseline. The statistical analysis was repeated using only those



respondents who scored below the mean on the respective measures, however again there were no statistical significant differences between conditions. Nevertheless it is noteworthy that even when including only those respondents who scored below the mean, scores remained high, with all but two of the variables still having mean scores above the midpoint of the response scale. Also, the inclusion of only respondents who scored below the mean substantially reduced the numbers of participants available for analysis, rendering the analysis considerably underpowered.

Measures of sexual behaviour can be liable to social desirability bias and this may account to some extent for the tendency to answer positively. At the planning stage of the research, consideration was given to including a test that measures socially-desirable responding, such as the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960). A decision was made not to include such a questionnaire in the current study due to concerns that the addition of such a measure would increase the length of an already extensive questionnaire; however this should be considered in future studies of this type.

### **Theory of Planned Behaviour**

The correlations between the variables provided support for the relationships specified by the TPB. Correlations between attitude, subjective norm and PBC, on the one hand and intention to use condoms on the other, were medium to large (Cohen, 1992) and all statistically significant ( $p < 0.004$ ), ranging between .335 (intention and perceived behavioural control) and .509 (intention and attitude). The strongest correlation identified was between self-efficacy and PBC, providing support for the argument that PBC is closely related to Bandura's construct of self-efficacy (Ajzen, 1998; Bandura, 1998).

### **Additional cognitive antecedents of condom use**

#### Norms

As discussed in the introduction, researchers who have examined the relationship between normative influences and condom use, report that descriptive norms have been found to have a stronger correlation with condom use than subjective norms (Abraham *et al.*, 2004; Sheeran *et al.*, 1999). In the current study subjective norm had a greater correlation with intention to use condoms ( $r = .429$ ) than descriptive norm ( $r = .219$ ), although both were statistically significant ( $p < 0.004$ ). The relationship between the relative strength

of normative influences on intention and condom use warrants further exploration in future research.

#### Preparatory actions

Following previous research that identified preparatory actions such as carrying condoms and having condoms available had medium to large correlations with condom use (Sheeran *et al.*, 1999), this study included a measure of intention to obtain condoms and a measure of intention to discuss condoms. The correlations of these measures with intention were lower than expected ( $r = .127$  for intention to obtain condoms and  $r = .316$  for intention to discuss condoms). This was also the case for communication about using condoms. In their meta-analysis, Sheeran *et al.* (1999) identified that communication with sexual partners about condoms had the highest correlation with condom use ( $r = .46$ ). In the present study, the correlation between communication with a partner and intention was small ( $r = .219$ ), although statistically significant ( $p < 0.004$ ).

#### **Condom use errors**

Previous research has identified that diverse populations from college students to STI clinic clients, do not use condoms correctly during sex, with problems ranging from putting on condoms incorrectly, to only wearing the condom for part of the sex act. As a result, researchers have recommended assessing condom use errors in addition to condom use consistency (Crosby *et al.*, 2005; Fishbein & Pequegnat, 2000; Noar *et al.*, 2006). In the present study, knowledge of the extent of condom errors is restricted due to the small numbers reporting sex in the last month. Of the 22 who had used a condom for sex in the last month, three (13.6%) reported that they had experienced a condom breakage and six (27.3%) reported that they had put a condom on late. Although caution must be exercised in interpreting these results due to the small sample, these figures indicate that both these condom use errors are relatively common. Such high rates of condom use errors are similar to those found in a recent survey of students aged 16-18 in English schools. Hatherall *et al.*, (2007) report that of 74 diary respondents, 31% applied a condom late and 9% removed a condom early at least once over a six month period.

These findings are important from both an empirical and applied perspective. From an empirical standpoint, they support researchers who have argued merely assessing consistency of condom use, and not correctness, may underestimate the level of STI and pregnancy risk (Crosby *et al.*, 2005; Fishbein & Pequegnat, 2000). From an applied perspective, sexual health interventions

designed to increase condom use, also need to address correct condom use in order to maximise their impact (Hatherall *et al.*, 2007). Although condom use increased in young people over the decade between 1990 and 2000, research reveals high rates of inconsistent condom use among those with multiple partners (Cassell *et al.*, 2006). Thus an integral part of any intervention designed to improve condom use should incorporate the importance of consistent condom use, in addition to addressing common condom use errors.

The rates of condom use errors are also interesting in this sample when compared in context with the findings of the cognitive measures. Taken in isolation, the cognitive measures could suggest this population is low risk, as typically the cognitive antecedents showed the vast majority of young people intend to use condoms and are positive about using condoms. However the condom use error data suggests that some young people who are sexually active are not using condoms correctly and thus exposing themselves to risk of unintended pregnancy and STIs.

#### **4.2 Quantitative and Qualitative feedback of the DVD**

It seems unlikely that the lack of an effect of the intervention can be accounted for by students' disengagement with or dislike of the DVD. Both the quantitative and qualitative results of students' feedback show the vast majority enjoyed it. For instance, nearly 100% of students said they would recommend watching the film to other young people and the majority said they liked the DVD 'very much' (29%) or 'quite a lot' (47%).

The qualitative data complemented the quantitative data by providing an insight into young people's views of the DVD. In response to the open ended question, there were 84 positive comments compared to 24 negative comments. Many of the young people wrote generic positive comments about the DVD, such as they really enjoyed watching the film. Students mentioned that the DVD was appealing in itself, was not patronising and a good medium for getting the safer sex message across. Some commented that they thought all young people should watch the film. A large number thought the DVD was educational, and that young people in general would be more informed having seen it. The students commented that the DVD highlighted the importance of safe sex, consequences of unsafe sex and facts about STIs. Some wrote the DVD may result in a change in their behaviour, such as prompting them to go for an STI screen and how watching the DVD would make safe sex easier to talk about.

The qualitative data provides an enlightening insight into possible explanations why the DVD was received favourably. A number of participants found the DVD appealing because it featured other young people. Using young people of similar age to themselves, that they could relate to, as opposed to professionals such as teachers, appears to have been a very attractive mechanism for delivering the safer sex message. A few participants also commented that they liked the fact that they knew some of the young people in the film and could recognise the geographical locations. The DVD was filmed entirely in Westminster and in addition to featuring central London locations, such as Soho, it also featured areas which are far less well known and typically frequented by local young people. For example, a part of the DVD is filmed underneath the A40 Westway with young people skateboarding and dancing. In addition, several commented they liked the music track and felt that music was a good way to get the safer sex message across.

Whilst the majority of comments regarding the DVD were positive, there were some negative comments. A few felt that the RAP/hip hop music was targeting only one group of young people and therefore not inclusive to all. Several said that they already knew the information presented in the DVD and that it should have provided more comprehensive information about safer sex and STIs. This is particularly interesting given that a large number of young people provided positive comments about the DVD being informative about safer sex. The qualitative data suggests that students' baseline knowledge of sexual health varied, so that for some young people the DVD provided them with information that was previously unknown to them, whereas for others, it presented information they were already aware of.

Informal observation from the author and other professionals delivering the intervention was that the DVD was received positively. Students laughed aloud when watching the DVD and it held the attention of students. This had been particularly noticeable in a large class of boys who had been rowdy before watching the DVD, but did not converse amongst themselves when the DVD was played. Students also asked the researchers how they could obtain a copy of the song. Moreover, when returning to collect the follow-up data, teachers commented that students had enjoyed the session and talked about the film afterwards. These insights are difficult to capture quantitatively but such observations are arguably very insightful into the effect of the DVD in the school environment.

The popularity of a DVD featuring peers in this study mirrors the findings of the large scale randomised cluster trial of a peer led approach in the RIPPLE study. The results of RIPPLE showed that the peer led education was more popular than teacher led education, but as with the current study, there were no differences between the two groups in terms of outcomes (Stephenson *et al.*, 2008).

### **4.3 Sample characteristics**

#### **Sexual experience**

In terms of sexual experience, the sample appeared to be representative of this age group, with 36.1% reporting they had experienced sexual intercourse. In Coleman and Testa's (2007) recent large scale survey of 3,007 school students in London aged 15-18, 31% of the sample had experienced sexual intercourse. A slightly lower rate of sexual experience in Coleman and Testa's study would be expected as almost three-quarters were aged 15 or 16 years and thus younger than the current sample.

Males reported more sexual experience, with 47% of male and 27.5% of female respondents reporting that they had experience of sexual intercourse. This gender difference is typical with a number of studies reporting higher self-reports of sexual behaviours from men and lower reports from women (Catania, Binson, Dolcini *et al.*, 1995; Catania, Gibson, Chitwood *et al.*, 1990; Tourangeau, Smith, & Rasinski, 1997; Turner, Miller, & Rogers, 1997), including adolescents (Coleman and Testa, 2007). For example, in Coleman and Testa's study, 38% of young men reported experience of sexual intercourse compared with 24% of young women.

Gender differences are most apparent in men and women's reports of the number of heterosexual partners (Schroder, Carey, & Venable, 2003). In the current study, the majority of male and females who reported having sex with one partner was similar, with 10 males and 11 females reporting having had sex with one person. However 20 boys compared with 11 girls reported that they had had sex with two or more partners. As Schroder *et al.*, (2003) explain, the reasoning for this gender difference is unclear, although the most plausible explanation is a response bias, with the number of heterosexual partners being overreported by men and underreported by women (Tourangeau & Smith, 1996). When gender differences do emerge, it is unclear which gender provides the more accurate reports. More research is needed to further evaluate the

degree, causes and other moderators of gender-specific inaccuracies in sexual behaviour self-reports (Schroder *et al.*, 2003).

Ajzen and Fishbein (2005) acknowledge that the reliability of self-report measures may be expected to vary as a function of the behaviour and context in question. As the reporting of sexual behaviour is a sensitive area, it raises the suspicion that self-reports may be less than accurate. Whilst acknowledging the difficulties with collecting sexual health data via self-administered questionnaire, a review of the different methodologies for collecting sexual experience data which is recognised as highly sensitive, found that compared with other data collection methods, self-administered questionnaires lead to higher reports of sensitive behaviours and thus may reduce socially desired responding (Schroder *et al.*, 2003).

### **Ethnicity**

Participants were from a diverse ethnic background, with a high proportion being from Black and Minority Ethnic (BME) groups. The majority identified as White British (32.7%) followed by Black African (12.2%), Arab (10.9%), White Eastern European (4.8%), Black Caribbean (4.1%) and Bangladeshi (3.4%). The inclusion of a high number of BME young people suggests the sample were representative of the population of Westminster (Westminster PCT, 2008). Prevalence data of STIs shows disparities amongst ethnic groups and indicates Black young people are those at greatest risk. National surveillance data (Health Protection Agency, 2007) and localised surveys within service-settings (Low, Sterne, & Barlow, 2001) report higher rates of new cases of STIs among Black as compared to white groups.

### **4.4 Consideration of findings in relation to previous literature**

The findings in the present study are in contrast to those of Lemieux *et al.* (2008) who found that an intervention using popular and musically talented young people, termed 'natural opinion leaders', to produce and disseminate a music track for HIV prevention within a school in America was successful in a number of outcome measures. Results showed that at 3 month follow-up, the intervention had positive effects on several aspects of HIV prevention motivation, behavioural skills, condom use and HIV testing behaviours.

Although both the current study and Lemieux *et al.* (2008) utilised music as a mechanism of promoting safer sex, there were differences in the content of the interventions which may explain the differences in the observed outcomes.

Firstly, in the Lemieux *et al.* study, the young people who recorded the song were pupils at the school, as opposed to the current study where the young people were from a local youth club. Although in the current study, the young people in the DVD were of a similar age to the school students and were from the same London Borough, arguably using students from the same school where the intervention is carried out, who are known and popular within the school, has the potential for a stronger effect on peers than using young people who are unknown to the target audience. In addition the young people in the Lemieux *et al.* study were purposively selected because they were “well respected, influential, able to credibly promote safer sex or abstinence and previous musical experience” (p. 351-352), thus maximising the potential for ability to influence their peers.

Secondly, in the Lemieux *et al.* study, it was young people themselves who disseminated the intervention to their peers as opposed to external facilitators. Using peers to deliver the intervention may be a more powerful mechanism in terms of ability to influence young people than utilising professionals to disseminate the intervention.

Thirdly, Lemieux *et al.* gave pupils copies of the music track on a CD to keep, in addition to other promotional materials. In contrast in the current study, young people were signposted to an internet site where they could hear the song. Arguably, in order to reinforce the message in the song, the music would need to be heard by participants more than once and by giving participants a CD of the song may have increased the likelihood that it would be listened to on more than one occasion.

Thus there were several differences between the Lemieux *et al.* intervention and the current study. Arguably Lemieux *et al.* went a critical step further by using musically talented popular opinion leaders from the immediate community, for others in the immediate community. As Lemieux *et al.* explain,

“if performers are credible in their delivery of a positive message, prosocial effects may be observed. This method of peer involvement maximizes the potential social relevance and also led to a heightened sense of awareness, interest and involvement that extended throughout the treatment condition and possibly beyond” (p.355).

It does seem to have been the case in the current study that the young people featured in the DVD were credible to their peers. The qualitative analysis revealed that many young people liked the DVD because they could relate to it. Participants commented that they liked the music and described how they liked the fact it used local young people.

An avenue for future research would be to consider whether dissemination of the intervention using the methodology of Lemieux *et al.*, such as using the young people featured in the DVD to disseminate the intervention, distributing the song on CD and producing promotional materials, would demonstrate positive outcomes.

The results of the current study need to be contextualised with the findings of the two large scale trials (SHARE and RIPPLE) of sex and relationship education (SRE) conducted in the UK which have demonstrated only modest effects. The more rigorous evaluations of school SRE in the UK have reported some encouraging findings, such as a positive effect on regret at first intercourse (Wight *et al.*, 2002), intentions to resist unwanted sexual activities and intentions to discuss condoms with sexual partners (Abraham *et al.*, 2004), and fewer reports of intercourse amongst girls by age 16 (Stephenson *et al.*, 2004). However, findings are not universally positive and do not extend to biological outcome measures. For example, in depth analysis of RIPPLE and SHARE showed there were no significant differences between the groups in numbers of conceptions and terminations as determined by NHS records (Henderson *et al.*, 2007; Stephenson *et al.*, 2008).

In these studies, as with the current research, it is possible that the potential for whole class sex education to influence young people's behaviour might have already been reached by conventional SRE provision. However, as will be described later, SRE within schools is often described to be insufficient and lacking in quality by young people, if indeed experienced by them at all.

#### **4.5 Strengths of the intervention**

##### **1) Innovative approach**

The DVD in the current study included young people from a variety of ethnic backgrounds, but was arguably targeted at Black young people more than other groups, by using a Black young man to present the documentary and through the hip-hop song. As discussed in the introduction, the use of hip-hop music has been recommended as a mechanism for sexual health promotion for African American adolescents (Stephenson *et al.*, 2008). As Black young people are reporting greater levels of risk behaviours (Coleman & Testa, 2007) and are disproportionately affected by STIs (Health Protection Agency, 2007; Low *et al.*, 2001), the present intervention deserves praise for utilising an innovative approach which may appeal in particular to this group. Arguably innovative interventions such as these that utilise music and film, deserve further attention.



Initiatives that are designed for a particular target audience are more effective than those that are generic in design (Aggleton, 2000; Kelly, Parker, & Oyosi, 2002; Mitchell, 1998). Unfortunately, the sample size in the present study was not large enough to see if the effectiveness of the intervention varied depending on the characteristics of the audience. The intervention programme might have been effective with certain, as yet unidentified subgroups, but the effects are obscured within the whole sample.

## **2) Youth involvement and inclusivity of different groups**

Another positive aspect of the DVD was its involvement of young people in the design of the intervention. Selikow, Flisher, Mathews *et al.*, (2006) review the literature of HIV prevention media messaging initiatives for young people and provide a number of recommendations. One of their recommendations is that,

“young people should not only be the 'target' of messaging initiatives but should play a central role in their design and implementation...The youth need to be at centre stage when it comes to devising strategies to prevent HIV (Kiragu, 2001). They are important, not only because they constitute the target audience, but because they can play a key role in the design of appropriate messaging initiatives” (p.65).

An added benefit of youth involvement is that it provides a channel for young people to invest their free time and energy in a creative and safe way (Flisher, Wolf, Selikow *et al.*, 2006). The Bedroom Business DVD, which involved young people throughout its development and very much contains messages ‘by young people for young people’ should be acknowledged for adopting these recommendations concerning youth involvement.

Another of Seikow *et al.*’s recommendations is inclusivity, “It is important that all groups are targeted *and* represented in HIV-prevention initiatives” (p.68). The Bedroom Business DVD deserves recognition for its inclusivity to different groups. For example, the presenter interviews a gay man, a man living with HIV and young people from a wide variety of different ethnic backgrounds.

## **3) Audience Engagement**

As discussed above it was clearly evident from the qualitative and quantitative feedback that the DVD engaged its audience and was enjoyed by the vast majority of participants.

#### **4.6 Limitations of the Intervention**

Whilst there are several strengths of the intervention, it does also have a number of notable limitations.

##### **1) The DVD was not based on any psychological model/theory**

There is a strong argument that the intervention would have been more effective in changing the cognitive antecedents of condom use, if it had been developed utilising one of the evidence based theoretical models of health behaviour. As Lemieux *et al.* (2008) points out this is a problem for many interventions in the classroom,

“Because many programmes aimed at adolescents occur in classroom settings as part of the health curriculum, they often exclusively target informational deficits and may not adequately utilize behavioural science theories of health behaviour change in their design or evaluation (Fisher & Fisher, 2000; Kirby, 1999; Kirby & DiClemente, 1994) (p.349)”.

Reviews of STI/HIV interventions with adolescents have shown that utilisation of theoretical models in intervention development and implementation is associated with improved STI risk and behaviour outcomes (Jemmott & Jemmott, 2000; Sales *et al.*, 2006), although there are SRE programmes developed using theory which have had limited impact (for example, Henderson *et al.*, 2007). It is worth noting that this intervention is by no means unique in not utilising a theoretical model in its development; many published papers do not identify that they have applied theory in the development of interventions including, and beyond, the sexual health field (Hardeman *et al.*, 2002; Michie & Abraham, 2004). Thus a recommendation for health promotion practitioners and those developing health promotion campaigns is to utilise theory in intervention design.

##### **2) Lack of comprehensive content in the DVD**

At the initial stages of this study, the DVD was coded to understand the messages it contained, using existing coding frames including Abraham and Michie's (2008) taxonomy of behaviour change techniques and a coding frame developed specifically for safer sex videos (Herek *et al.*, 2001). Coding the DVD against these existing coding frames proved informative for assessing the current DVD, not only in terms of revealing the themes it contained, but also in terms of the themes which are *not* present. Although the DVD contained messages that could be identified as designed to influence attitudes and subjective norms present both in the TPB and Abraham and Michie's taxonomy,

a number of themes identified in Herek et al.'s content analysis of safer sex videos were *not* present in the DVD evaluated here. These include:

- Transmission and Prevention. Explanations of how STIs are transmitted (for example, through oral, anal and vaginal sex) and explanations of how STIs are *not* transmitted (for example, sharing food, toothbrushes, holding hands);
- Explanation of how condoms protect against STI transmission, and other risk-reduction practices;
- Prompting intention formation. The DVD did not directly encourage formation of a behavioural intention;
- Interpersonal aspects of sexual risk reduction (for example, how to negotiate with a partner for safer sex, how to refuse to have unsafe sex and encouragement to notify partners' about testing positive for STIs);
- Techniques of sexual risk reduction (for example, verbal explanations of how to use condoms, demonstrations of how to use a condom, discussion of safe sexual activities).

This illustrates how the DVD could have been far more comprehensive in its content, for example, it is lacking in helping young people develop the interpersonal and technical skills needed for condom use. This concern about the lack of information in the DVD tallies with some of the feedback given by the participants. A sizeable proportion of students reported that they did not learn much from the DVD. When asked 'how much did you learn in the session?', 29% of students answered either 'a little' or 'nothing'. The qualitative data also revealed that several young people would have liked more comprehensive information.

### **3) The DVD did not include a skill based component**

The DVD was arguably missing some of the key components that research has identified as related to the success of sexual health interventions. Robin *et al.*'s (2004) review of behavioural interventions designed to reduce incidence of HIV, STDs and pregnancy among adolescents, found that practical, skills based programmes were the most successful,

"programs demonstrating positive effects included content that was specific to reducing sexual risk behaviour such as refusal of unwanted sex and condom-use skills. Programs with positive effects most commonly employed interactive and participatory educational strategies" (p.18).

An individual's self-efficacy for condom use skill has been found to be important in STI/HIV intervention studies. In a meta-analysis of HIV prevention interventions for adolescents, Johnson *et al.* (2003) found that interventions achieved greater success when condoms were provided and with more information and skills training. Condom use skill training increases condom use skill self-efficacy, that is, the self-efficacy that you can use a condom correctly. This has been described as 'technical skills self-efficacy' by researchers whom have investigated whether sexual health interventions designed to increase this construct are effective in changing HIV/STI prevention attitudes and behaviours (Jemmott *et al.*, 2005; Sanderson, 1999; Sanderson & Jemmott, 1996). For example, in an RCT of an STI risk reduction intervention, Jemmott *et al.* (2005) compared three conditions: information based which provided information necessary to practice safer sex, skill-based which provided information and taught skills necessary to practice safer sex and a health promotion control. Jemmott *et al.* (2005) found skills intervention participants reported less unprotected sexual intercourse at the 12 month follow-up than did the information intervention participants or health control participants, suggesting that enhancing skills should be a critical goal for interventions designed to reduce risk sexual behaviour.

Research suggests that although a sexual health DVD should cover factual information, such a limited focus is insufficient. Interventions must also develop skills. The design of a skills based intervention would draw on Bandura's (1984) concept of self efficacy which proposes that people are more likely to engage in certain behaviours when they believe they are capable of executing those behaviours successfully. Methods for enhancing condom use skills include handling condoms, practicing putting condoms on anatomical models, and role-playing realistic situations that involve pressure to have unprotected intercourse. It is thus argued that the current intervention would be strengthened by inclusion of methods such as these for developing condom use skills.

#### **4) Lack of evidence for perceived susceptibility**

During the coding of the behavioural change techniques in the DVD, it was identified that the majority of the messages were targeting the construct perceived vulnerability. There were several instances where professionals spoke of the statistics concerning rates of STIs amongst young people. The focus on increasing perceptions of risk for contracting an STI is common in HIV/STI interventions. For example, in a meta-analysis of behavioural HIV prevention

interventions on the sexual risk behaviour of sexually experienced adolescents, Mullen *et al.* (2002) found that while no pattern of content predominated, content designed to increase adolescents' interpersonal skills and perceived risk for HIV/AIDS were most often clearly included in interventions.

In the current study there was a small but statistically significant correlation between perceived vulnerability and intention (.271). However, there was no statistically significant difference in perceived vulnerability between the intervention and control group. It is important to explore potential explanations for this finding, given the focus of the DVD on this construct. As noted previously, most measures, including perceived vulnerability were hampered by a ceiling effect. Participants mean scores for this measure were high at baseline, indicating that the majority of participants already felt vulnerable to STI infection if they did not use a condom. One factor that may explain participants' high mean scores for perceived susceptibility to STI infection is the prominence of media attention around the prevalence of STIs in young people. In the last few years, the Department of Health has spent over £50 million on a sexual health advertising campaign to warn young people about the prevalence of STIs. It is thus a possibility that such awareness campaigns and media interest have been successful, such that the majority of young people consider themselves to be susceptible to infections if they do not use condoms. It is therefore arguable that a focus on increasing young people's perceived vulnerability to STIs in this study was unwarranted, due to the fact that the majority of young people already held the belief that they need to use condoms to avoid acquiring an infection.

The evidence surrounding the impact of the strength of the relationship between perceived susceptibility and behaviour change is pertinent when evaluating the DVD. Perceived susceptibility forms a key component of the well known health behaviour model, the HBM and is also present in a number of other health behaviour theories including PMT, the ARRM, the IMB model, the Extended Parallel Process Model (Witte, 1992), Precaution Adoption Process Model (Weinstein, 1988), and Theory of Gender and Power (Connell, 1987).

Despite the inclusion of susceptibility in several theories, a large body of research has demonstrated that susceptibility has a weak relationship with behaviour. For example, referring to the HBM, Sheeran and Abraham (1996) state "overall the results of quantitative reviews of susceptibility, severity, benefits and barriers components suggest that these variables are very often significant predictors of behaviour but that their effects are small" (p.31). In addition, Sheeran *et al.*'s (1999) meta-analysis of predictors of condom use

found that of the 36 studies that examined susceptibility, overall there was a very small positive correlation ( $r = .06$ ) between condom use and perceived risk of HIV infection. In a more recent examination of the usefulness of PMT in predicting condom use in South African adolescents, Boer and Mashamba (2005) found the variable of vulnerability did not contribute significantly to condom use intention.

Despite the evidence which suggests susceptibility is only weakly related to health behaviours, including condom use, health psychologists do acknowledge its importance, as Abraham and Sheeran (2000) state, "There is little doubt that ensuring people are aware of a health threat and persuading them that they are susceptible to it unless they act, i.e. reducing defensive optimism (Schwarzer, 1998), is likely to be prerequisite to the promotion of health-related action (Weinstein, 1988; Wurtele, 1988)(p.5)."

However given the majority of evidence suggests the relationship between safer sex behaviour and perceived vulnerability is weak, the focus of the DVD on perceived vulnerability, coupled with a lack of attention on other constructs shown to have a strong and consistent relationship with condom use, such as self-efficacy, is in essence a major limitation when evaluating the DVD against the evidence base for sexual health interventions.

## **5) Intervention duration**

Another factor to consider when examining the limitations of the current intervention is intervention duration. The intervention was brief, with the DVD lasting under 30 minutes and the entire session lasting less than one hour, although this is likely to be typical of the time allocated to SRE in schools in England (Stephenson *et al.*, 2008). It is debatable whether such a brief intervention can be expected to produce significant outcomes after four weeks. Common sense would dictate that as with any other one-time intervention, any effects are unlikely to persist without reinforcement. If more resources had been available, it would have been possible to have a more intensive programme, but it is unknown as to whether this would have had greater impact. In the SHARE study of SRE delivered in schools in Scotland, a 20-session adult led SRE programme that was robustly designed and evaluated, had no impact on conception, abortion, or sexual behaviour (Henderson *et al.*, 2007). The relationship between intervention duration and impact on sexual health is not straightforward and the evidence is unequivocal with reviews in this area unable

to draw firm conclusions (Jemmott & Jemmott, 2000; Robin *et al.*, 2004; Sales *et al.*, 2006).

#### **4.7 Strengths of the Research Design**

##### **1) Utilisation of an RCT design and theory based outcome measures**

This study can be commended in its utilisation of the randomised control method, considered to be the most rigorous of all research designs and the 'gold-standard' methodology (Ingham, 2005). "Well designed and properly executed randomised controlled trials (RCTs) provide the best evidence on the efficacy of health care interventions" (Altman, Schulz, Moher *et al.*, 2001, p.663). The present study randomised schools to an intervention condition or a no intervention control. It was prospective (participants were identified and then followed forward in time) which is the most desirable design for establishing relationships between outcomes and independent variables. It used a single-session intervention, which ensured that all participants attended the entire intervention. In addition, the study employed theory based outcome measures to evaluate the intervention.

In the planning the research design, careful consideration was given to whether it was preferable to randomise classes or whether it was preferable to randomise schools. There are advantages and disadvantages to both designs. Randomisation of classes within school has the advantage of controlling for differences between schools such as school culture and previous SRE. However this design creates the risk of contamination through communication between participants from different conditions. As a result of a concern about contamination, it was decided to randomise schools and minimise the differences between schools by matching them as closely as possible in terms of their demographic profile.

In terms of other confounding factors, young people were not exposed to any formal SRE during the period between baseline and follow-up data collection. In addition, the author is not aware of any other condom-relevant health promotion campaigns occurring during this period which might have influenced participants. However, due to the size of this study, it was impossible to control for all potential confounding factors, such as previous SRE delivered at the school. Whilst utilising an RCT methodology is acknowledged for its merits, to do an RCT properly in the area of SRE, due to the need to control for so many

potentially confounding factors<sup>25</sup> would require such a large sample size “to control for so many variables the scope of such a study would exhaust the school-aged population of a large country” (Ingham, 2005 p.376).

## **2) Intervention fidelity and engagement of facilitators**

A number of controls were put in place to ensure the fidelity of data collection and administration of the intervention across classes and schools. This included gaining the commitment of experienced and appropriately qualified facilitators to assist in data collection and intervention delivery. Facilitators had differing professional backgrounds and included school nurses, sexual health promotion specialists and MSc Health Psychology students. Facilitators all had experience of research or/and sexual health promotion. All facilitators were required to attend training and were given clear instructions regarding what was required of them in the sessions. A script for outlining the research to students was developed to ensure standardisation. None of the facilitators were paid for their involvement but participated due to enthusiasm for the project after being approached by the researcher. For example, the author attended the school nurse team meeting, explained what was required for the project and asked for expressions of interest. Only professionals with experience of delivering sexual health promotion sessions were asked to deliver the intervention condition.

## **3) Need for research evaluating DVD/video sexual health interventions in the UK**

Previous research has shown considerable potential for video/DVD interventions in a variety of settings with different populations, showing a range of positive outcomes including changes in attitude, condom use, number of protected sexual acts and reduction in STI acquisition (Downs *et al.*, 2004; Kalichman *et al.*, 1999; O'Donnell *et al.*, 1998; O'Donnell *et al.*, 1995; Torabi *et al.*, 2000). However the vast majority of studies in this area have been carried out in the US. There is a paucity of studies evaluating DVD sexual health interventions in school settings, particularly in the UK, despite their potential usefulness. For instance, it has been argued that DVDs are convenient for teachers in school settings (Wetzel *et al.*, 1994) and provide a structure for initiating discussions

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<sup>25</sup> Potential confounding variables are for example, class size, age of delivery, content, style of delivery, supporting material, mixed-sex versus single-sex delivery, ethnicity, level of parental involvement, use of outside speakers, length of course etc.



about sensitive topics (O'Donnell *et al.*, 1995). This study thus progresses the knowledge in this field by addressing the dearth of studies of this type in the UK.

#### **4) Ecological validity**

It could be argued the research possesses ecological validity. For a research study to possess ecological validity, the methods, materials and setting of the study must approximate the real-life situation that is under investigation (Brewer, 2000). The study was carried out in the natural setting of secondary schools, and thus participants were studied in their natural environment. Further, the intervention was carried out by health professionals, such as school nurses, rather than facilitators selected and trained solely for the purposes of the research study. The intervention itself also approximated real-life as it could take place within the existing school timetable.

#### **4.8 Limitations of the Research design**

##### **1) Lack of Long-term follow-up**

Due to resource constraints, there was only one follow-up data collection point at four weeks. The study could have been improved with longer term follow-ups. The lack of a long-term follow-up is particularly pertinent given that research has identified that some interventions show significant effects at 12 month, but not at three or six month follow-up (for example, Jemmott *et al.*, 2005).

##### **2) Combined DVD viewing with group discussion**

A possible criticism of the study is that the intervention comprised both DVD viewing with group discussion, as opposed to DVD viewing alone. As a result, if an effect of the intervention had been observed it would have been impossible to isolate the specific impact of the DVD and/or group discussion. Some evidence suggests that facilitation plus film is more effective than film alone (Ferland *et al.*, 2002; O'Donnell *et al.*, 1995) and group discussion has been promoted as beneficial to pedagogy for a variety of reasons, including promoting learning and cognitive development (Ahern *et al.*, 1992; Bartholomew *et al.*, 2001) and understanding (Ahern *et al.*, 1992; Beckman, 1952). However studies comparing DVD viewing with DVD viewing plus group discussion are scant. More research is needed to distinguish whether facilitation plus viewing a film is more effective than film alone.

### **3) Focussed on cognitive variables not behaviour**

Just over a third of the sample reported they had experienced sexual intercourse at baseline (36.1%), of which 17.7% (26 participants) had had sex within the last month. Thus if the aim of the study had been to evaluate the impact of the DVD on sexual behaviour, the study would have been notably underpowered. The focus of the questionnaire on cognitive variables was arguably justified, allowing all students to participate, including those who had not yet experienced their first sexual intercourse. Furthermore adolescents are an important target group since pro-condom cognitions should ideally be established before the initiation of sexual activity.

However it must be considered that for the majority of participants, the questionnaire items were about a behaviour they had not experienced and they were required to *imagine* what they would do. It is therefore possible that the findings would be different if participants had experience of using condoms and were sexually active at the time of the intervention.

## **4.9 Methodological issues**

### **Questionnaire development and psychometric properties**

#### **1) Piloting**

Piloting the questionnaire was essential in identifying and rectifying problems before undertaking the study. As a result of the pilot, several changes were made to the layout, the wording and the instructions for completing the sorting code. The pilot also identified low internal consistency reliability for the self-efficacy and PBC sub-scales, leading to an increase in the number of items for these scales.

#### **2) Reliability**

The questionnaire was found to have good internal consistency reliability as measured by Cronbach's alpha. The majority of scales had a coefficient alpha of .8 or above, with all scales having a coefficient above .7, including PBC which has frequently been found to have low internal reliability (Ajzen, 2002; Sparks, 1994). This is a clear strength of the questionnaire. The reliability of the questionnaire could be explored further by investigating test re-test reliability.

During data collection some students commented that the questionnaire was too long and that the questions were repetitive. The length was mainly due to a desire to produce a reliable questionnaire and thus multiple measures were used, as from a psychometric perspective these are more appropriate than single item measures because of increased reliability (Conner & Sparks, 2006).

Researchers have noted previously that questionnaire length in a school setting is an important consideration. Abraham *et al.*, (2004) reported that students found multiple measures frustrating and de-motivating and as a result decided to employ single item measures. Multiple items were chosen in the present study because participants were older than in the Abraham *et al.* study and following other school based research studies which employed multiple measures (for example, Krahe *et al.*, 2005). The preferences of students and realities of data collection in the classroom must be carefully weighed up with the consideration of questionnaire reliability.

In addition to the comments about questionnaire length, there were positive comments about the questionnaire. Students commented that they liked the front cover and the puzzles that were at the end of the questionnaire for early completers. Although simple, these characteristics were effective at increasing students' interest and engagement with the questionnaire and are thus recommended to other researchers wishing to undertake similar research.

### 3) Validity

A number of established sources were consulted to provide guidance for writing the questionnaire items, principally drawing upon Ajzen's (2006) recommendations for developing a TPB questionnaire and Francis *et al.*'s (2004) manual for health services researchers on constructing a TPB questionnaire. Guidance was also sought using TPB measures described in the existing literature (Conner and Sparks, 2006) and sexual health questionnaires used in school settings (Abraham *et al.*, 2004; Krahe *et al.*, 2005). As with reliability, the validity of the questionnaire could be explored further (see Francis, Johnston, Eccles *et al.*, 2004).

### 4) Sensitivity

Another important consideration is the sensitivity or responsiveness of the questionnaire (Marks, 2004). This refers to the capacity of a questionnaire to measure changes over time. As discussed previously, there was a notable ceiling effect and thus the questionnaire in this study was limited in its sensitivity to detect change. Further research would be desirable to further explore and improve the validity, reliability and sensitivity of the current questionnaire.

## **Issues with data collection**

### 1) Poor attendance in school

An unforeseen difficulty with executing the study was the high attrition rate due to poor attendance in school. Although the statistical analysis revealed no

differences between those who remained in the study and those that were not present at follow-up, the attrition is worthy of exploration from a methodological perspective.

Some attrition of participants had been expected and probable attrition rates were estimated based on a similar sexual health intervention study in a school setting (Krahe *et al.*, 2005). Unfortunately the current study had a much higher attrition rate than expected (51%) with 306 students present at baseline and 149 present at follow-up. As a result of the high attrition rates, the study was marginally under-powered. Cohen's (1992) power tables had identified a total sample size of 128 was required (i.e., 64 participants per group). At follow-up there were 61 students in the intervention condition and 86 in the control condition.

Attrition was particularly problematic in the largest school participating in the study (school 1). Although agreeing to the stipulations required of them by participating in the research (i.e., they would arrange two sessions, four weeks apart), the school did not arrange for a specific period in the time-table for data collection at follow-up. As a result, the only available opportunity to collect the follow-up data was tutorial time, which occurred at the beginning of the school day. Attendance at tutorial time was extremely poor. As a result, of the 91 students who had been present from this school at baseline, data from only 23 students was collected at follow-up, representing an attrition rate of 75% from this school. Failure to collect follow-up data from the majority of participants meant an ineffective use of resources due to the effort that had been required to carry out the study in this school.

## 2) Inability to match the questionnaire sorting code

In addition to poor attendance, some attrition was the result of an inability to match participants' questionnaire sorting code at time 1 with the sorting code at time 2. The sorting code had been devised in order to provide a mechanism of matching participants' questionnaires at time 2 from time 1 in a way that created a unique code and permitted anonymity. It was a 6 letter code, which required participants to state the first two letters of the name of their street, the first two letters of their mother's first name and the first two letters of their father's first name. Some participants left the entire sorting code blank, completed it partially or wrote different letters at time 2 from that at time 1. It may have been that due to the highly sensitive nature of the topic, that despite reassurances that they could not be identified from the sorting code, participants were still concerned about the confidentiality of their data and were uneasy about responding

honestly. This certainly seemed to be the case for a few students who raised concerns that they would be able to be identified from the sorting code despite re-assurance from the research team that this was not the case.

### 3) Environment during data collection

Besides attendance issues, another difficulty concerned the space and seating organisation at the schools during data collection. In two schools it was agreed to carry out data collection in the school hall. It was stressed to the teachers that due to the sensitive nature of data collection, it was important that students were seated relatively far apart to ensure they had privacy while responding to the questionnaire. It was requested that the students were seated similar to 'exam conditions'. However on the day of data collection, it had not been possible to arrange this. One school reported that although they had put a request in for this to be organised, the personnel required were absent due to illness. The other school was undergoing substantial building work at the time and advised that it had not been possible to arrange the hall as requested, thus at the time of data collection students were seated fairly close together. As a result, due to the large numbers of students and seating arrangements, vigilance was required to prevent students interacting. Privacy was important when responding to the questionnaire, as a feeling that their answers were not private could increase the potential for social desirability bias to influence responding. When the questionnaire was administered in smaller groups, with students sat further apart, it was easier to manage students' behaviour. As a result, classes were conducted in tutor groups wherever possible.

### 4) Accessing schools

All schools that were approached agreed to participate. Factors that contributed to the high level of participation may have been the nature of the sessions which meant teachers were required to be present but no other demands on the school were made. The school was asked for teachers to be present to handle any general matters such as discipline, but not involved in the practicalities of the research (such as collecting questionnaires) as it was felt critical that students were comfortable that the research was confidential and was not an initiative led by the school.

Face to face meetings at the school were important in terms of building relationships, planning the times and dates of the sessions and becoming familiar with the school and the layout of the rooms in which data collection would take place. At each school, the researcher suggested meeting all the year teachers prior to conducting the research in order to answer any questions and

outline what the project entailed. This offer was taken up by one of the schools, where the author attended the teachers' team meeting. This was a valuable opportunity to be able to explain the purposes of the research. It is also possible that as the author was an employee of the local NHS trust, this may also have been a factor in terms of increasing the schools confidence in the validity of the study and facilitated engagement with schools.

Schools were all approached in the spring term of the 2007/2008 academic year. Arranging the two sessions to take place four weeks apart was often the most challenging aspect due to the school calendar and accommodating existing commitments, school holidays and examination periods. Typically in Year 12/13 there is no regular existing timetabled slot for SRE.

In terms of recommendations for researchers wishing to carry out a similar study, the following is suggested:

- Meet teachers face-to-face
- If more than one session is required, ensure a slot in the timetable is available for follow-up sessions
- Ascertain likely student numbers that will be present at data collection as opposed to estimating student numbers based on the school roll
- The presentation of the questionnaire is important, for example, an attractive front cover and enjoyable puzzles for early completers at the end of the questionnaire
- Consider carefully questionnaire length
- Recruit a bank of professionals who are experienced in working with young people to assist in data collection
- Consider seating arrangements. Ideally, administer the questionnaire similar to 'exam conditions', with students sat at separate desks and teachers present.

#### **4.10 Further Research**

##### **1) Explore utilisation of the DVD with different populations**

A possibility for further research would be to explore the suitability of the DVD with a younger audience, such as those in Years 10/11 (aged 14 and 15). Although the DVD was designed with Years 12/13 (aged 16 and 17) in mind, experience of using the DVD and informal feedback from health promotion specialists and young people was that the DVD is also appropriate for a younger audience. The use of the DVD with identified at risk populations for teenage

pregnancy, such as looked after children and those who have been excluded from school, should also be explored.

Further research is needed with larger samples, including respondents with a lower educational background, with lower baseline scores on the cognitive antecedents and with different demographic characteristics, to explore whether the DVD is effective with particular sub-groups of young people. Also, a larger sample would permit an exploration of whether there are differential effects for those who are currently sexually active and those who are not, and those who have previous experience of using condoms compared with those who do not.

## **2) Explore different methodologies for data collection**

As discussed previously, in some instances there was an inability to match participants' sorting codes on their questionnaires at time 1 and time 2. Due to the sensitive nature of sexual health research, alternative methods of data collection should be explored. For example, participants could have completed the questionnaire online which may have increased feelings of trust that their data was anonymous. However this would be dependent on the school having sufficient computer equipment.

## **3) Incorporate a condom skills self-efficacy component into the intervention**

The Bedroom Business DVD does not include a section on how to use condoms either verbally by describing how to use them or by visually demonstrating how they should be used. As research has revealed the importance of condom use skill self-efficacy, it is proposed that the current intervention could be enhanced by the addition of an exercise which aims to increase this. An avenue for future research would be the inclusion of a self-efficacy intervention to explore whether incorporating behavioural skills training would enhance the current intervention. A format for a condom skills training intervention is detailed in appendix B9.

## **4) Explore peers as a mechanism for disseminating the intervention**

As referred to earlier, future research could consider whether using peers to disseminate the intervention, as opposed to professionals, would have a more positive outcome as this has been found to be successful in a similar study (Lemieux *et al.*, 2008).

#### **4.11 Diversity**

It would be a mistake to consider young people as one homogenous group, as there is, in reality, great diversity. This diversity encompasses many differences, including but not limited to, ethnicity, religion, culture, disability, socioeconomic status, sexuality and previous relationship experience. This section will consider diversity in some detail, particularly focussing on homosexuality and alternative lifestyles, abuse as sexual experiences, religion and the continuum between 'steady' and 'casual' relationships.

##### **1) Homosexuality and alternative lifestyles**

This study did not exclusively focus on young people of a particular sexual orientation, and thus all young people were included, regardless of their sexuality. The questionnaire determined sexual orientation by enquiring whether participants were attracted to people of the same sex, people of the opposite sex, or people of both the same and opposite sex. These response options allowed for identification as bisexual, gay, lesbian or heterosexual. Participants could also respond that they did not know/were not sure.

The questionnaire included a paragraph which deliberately reinforced the research was inclusive to all, regardless of sexuality or lifestyle choice. It stated, "Young people have a variety of sexual experiences, including having sex at different ages, having partners of the same sex, both sexes or the opposite sex. We will not judge you – all your experiences are valuable, whatever they are". When explaining what was meant by 'sex', two definitions of anal sex were provided, "a man's penis in a woman's anus or a man's penis in a man's anus", in order to make explicit that the research was concerned with the behaviour, regardless of the type of relationship. It was felt these definitions would also help counter heterocentrism, which is a criticism that could be levied at research of this type.

However, whilst the questionnaire could have been completed by all participants, the extent of its inclusivity is arguably limited due to the relative restrictive definitions of both relationships and sex. Relationships were categorised as either 'casual' or 'steady' and sex was defined as either anal or vaginal penetration by a penis. In particular, lesbians could have felt excluded from the majority of questions. Due to the desire to focus on sexual acts with the greatest risk of STI transmission, the questionnaire did not consider oral sex or penetration using non-sexual organs (e.g., fingering, fisting).



Studies of homosexual behaviour in young people are rare (Marston & King, 2006). As MacPhail and Campbell (2001) highlight, despite some notable exceptions (Holland, Ramazanoglu, Scott et al., 1990, 1991; Holland, Ramazanoglu, Sharpe et al., 1992), the literature often tends to refer to adolescents as a homogenous group and make sweeping generalisations about their sexuality. In particular, lesbians have tended to be ignored in the wider literature of sexual behaviour. Little is known about relationships between bisexual women or lesbians (Jarman, Walsh, & De Lacey, 2005; Lear, 1995).

A related limitation of the study is that the results were not analysed separately according to respondents' sexual orientation. Participants were analysed as one unit, regardless of their sexuality. However, it is possible that the results may have differed according to sexuality and analysing participants as one group would mask any differences. If larger respondent numbers had been obtained, the analysis could have taken into consideration participants' sexual orientation, and permitted exploration of potential differences.

## **2) Abuse as sexual experiences**

Another consideration is respondents' previous sexual experiences, which may include experiences that were sexually abusive. There is growing evidence that childhood and adolescent sexual abuse (CSA) is associated with a greater likelihood of sexual risk behaviours.

Three relatively recent reviews have summarised research in this area. In a meta-analysis, Paolucci, Genuis and Violato (2001) reported an association between CSA and sexual promiscuity (defined as early sexual activity and/or sex trading) in women. In another meta-analysis, Arriola, Loudon, Doldren et al. (2005) found that CSA among women was associated with unprotected sex, multiple partners and sex trading.

In a comprehensive systematic literature review, Senn, Carey and Vanable (2008) identified 73 studies that addressed the relationship between CSA and subsequent sexual risk behaviour. Senn et al. (2008) concluded a number of different sexual risk behaviours were relatively consistently associated with CSA in women, including younger age at first intercourse, a greater number of sexual partners, a greater likelihood of engaging in sex trading and a greater likelihood of having been diagnosed with an STI. This finding was robust across a variety of populations, including samples from the general population and those considered vulnerable (e.g., homeless, substance misuse).

Of significance to the current study, the association between CSA and sexual risk behaviour may begin during adolescence or earlier. For example, Upchurch and Kusunoki (2004) in a study of over 3,500 adolescent girls, found CSA was associated with a greater number of sexual partners, a greater likelihood of having intercourse before age 14, and greater likelihood of ever being diagnosed with an STI.

Relatively few studies have explored the association of CSA with sexual risk behaviour in males. Those that have investigated the effects on men, report findings similar to those for women, with consistent associations between CSA and sex trading, more sexual partners, more unprotected sex and STI infection. Concerning adolescent males, a large survey found CSA was associated with ever having sex and having three or more lifetime sexual partners (Nelson, Higginson, & Grantworley, 1994).

It is worth noting that the review of Senn et al. has a couple of limitations. One of the inclusion criteria was that literature had to be published in a peer-review journal. Whilst this can be useful as a marker of quality, it excludes grey literature and thus could be accused of publication bias. Further, the review only considered research in the US, and thus caution must be exercised in generalising the findings elsewhere.

In their review, Senn et al. provide an interesting methodological critique of research in this area. Limitations included a lack of a consistent definition of CSA (e.g., research has used different age criteria and type of sexual act considered abusive) and possible confounding of the CSA experience with some of the sexual behaviour outcome variables (e.g., age at first intercourse, often used as an outcome, may be confounded with CSA). However despite these limitations, it seems reasonable to agree with Senn et al.'s conclusion, that given the large number of studies reporting an association between CSA and later sexual risk behaviour, and the wide variety of populations in which this association is found, the association is robust and not likely to reflect a reporting bias.

Given that research strongly suggests experience of CSA is an important variable for sexual health outcomes, a limitation of the present study, and indeed the majority of research in this area, is a failure to consider experiences of CSA. This study did not distinguish between sexual experiences that were abusive, with those that were not. As discussed above, this is relevant to studies of this type, as it appears that the association between CSA and sexual risk behaviour may begin in adolescence. Future research in this area could be improved by

consideration of CSA, and explore further the effect of CSA on sexual behaviour outcomes, including condom use. For example, recent research has found abused adolescent females were more likely to think condoms interfered with sexual pleasure and less likely to think condoms were important to their partners (Hall, Hogben, Carlton et al., 2008).

### **3) Religion**

Researchers in the US have shown that religion can be a protective factor in sexual behaviour and risk (Lammers, Ireland, Resnick et al., 2000; Resnick, Bearman, Blum et al., 1997). Adolescents who had a higher 'religiosity' score were more likely to initiate sex at a later age, have used a condom in the past 6 months and have more positive attitudes about using a condom (McCree, Wingood, DiClemente et al., 2003).

The demographic data revealed participants were diverse in their religious beliefs. The majority reported a religious affiliation, with the greatest number identifying as Muslim (34%), Christian Other (15.6%), Church of England (15.0%) or Roman Catholic (8.2%). The sample was also diverse in terms of ethnicity<sup>26</sup>. As discussed previously, prevalence data of STIs shows disparities amongst ethnic groups, with Black young people being disproportionately affected by STIs (Health Protection Agency, 2007; Low *et al.*, 2001) and reporting greater levels of risk behaviours (Coleman & Testa, 2007). It is recognised that cultural factors, underpinned by economic and social inequalities, can have a marked impact on sexual behaviours and access to treatment (De Silva, 1997).

In the UK, there has been some research which contributes to our understanding of ethnic variations in sexual health, although most has been conducted on adult populations, where the inclusion of young people has been incidental. Beck, Majumdar, Estcourt et al., (2005) investigated barriers to using sexual health services in people of Bangladeshi origin in East London. This qualitative study included 58 people across the lifespan, who participated in either interviews or focus groups. Whilst participants acknowledged that sex outside of marriage occurred, there were concerns about shame and stigma if this was disclosed. Participants consistently identified worries about confidentiality in terms of accessing services. The authors note, "community values regarding sex outside of marriage were an important underlying factor in

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<sup>26</sup> Breakdown of participants' ethnicity can be seen in the Section 4.3.

participants' response to most of the questions. Sex outside of marriage was universally reported as "haram" (forbidden by Islamic teaching) and something that would bring shame and social stigma on the individual if this became known in the community" (p.159).

Coleman and Testa (2008) conducted in-depth interviews with 50 BME young people in London aged between 16 and 23 years. This research supports the findings of Beck et al. reported above. Participants described almost universal family and community disapproval of teenagers having sex and/or sex before marriage, due to cultural expectations and/or religious beliefs. Many spoke of how they felt unable to discuss sex and relationships with their parents, particularly Asians, Christians and Muslims. However, the majority of participants supported teenagers having sex before marriage, conditional on being 'responsible' and 'safe'. Most BME adolescents felt teenagers using condoms and contraceptives were 'smart', including many participants who did not believe in sex before marriage.

Interestingly, Coleman and Testa (2008) report participants' sexual health attitudes and experiences were better explained by religion than ethnicity. They explain, "this may in part be due to religious principles being more tangible and clearly attributed to scripture than non-religious cultural norms and values more frequently conveyed through social interaction. Christian and Muslim participants in particular reported similar sexual attitudes across a number of topics, including same sex relationships and sex before marriage. These participants encompassed diverse ethnicities indicating religion is an essential, if not more sensitive, variable to understand sexual attitudes among BME participants" (p.34).

As indicated above, there is relatively little research in this area. Questions remain as to how much the difference in sexual health outcomes are due to religion, and how much they are due to factors such as ethnicity, culture, and socio-economic status. This is a complex area. For example, the influence of religion may be modified by the cultural context. An illustration of this is teenage pregnancy rates. In the UK, the Bangladeshi community has a teenage birth rate almost twice that of the Pakistani community, despite both groups being predominantly Muslim (Berthoud, 2001).

#### **4) Relationship status: The continuum between 'steady' and casual relationships**

Condom use is influenced by the nature of the relationship between sexual partners (Sheeran *et al.*, 1999). Research has illustrated the importance of relationships between sexual partners and the way in which feelings of love or trust may affect perceptions of risk and intentions for condom use (De Visser & Smith, 2001; Holland *et al.*, 1991; Lear, 1995; Willig, 1997). One aspect of this is how method of contraception is influenced by the status of the relationship between partners. Macaluso *et al.*, (2000) found that consistency of condom use was higher with new and casual partners than regular partners and that consistent condom use decreased in partnerships that changed status from new to regular. As the relationship becomes more serious, partners tend to change their contraceptive method, typically relinquishing condoms for the contraceptive pill. For example, Cushman, Romero, Kalmuss *et al.*, (1998) found that condom use among women declined markedly once they initiated long-term hormonal contraception. Holland *et al.*, (1991) conducted a qualitative study involving over 150 women between the ages of 16 and 21 in London and Manchester. Holland *et al.* found that moving from condoms to the pill often symbolised commitment to the relationship, "This transition from condoms with new partners to the pill with steady partners is laden with symbolic meaning and can be used to signify the seriousness of a relationship, a way of showing someone that they are special" (p.140).

In the present study, two partner types were presented to participants; casual and steady. A casual partner was defined as 'someone you have sex with once or infrequently (i.e., one night stand)' and a steady partner as 'someone you have sex with in an exclusive relationship, where you are only having sex with each other and no-one else (i.e., a steady boyfriend/girlfriend)'.

Whilst this study should be commended for the presentation of clearly defined partner types, it is acknowledged that these definitions are restrictive and have the potential to exclude certain types of sexual relationships. For example, respondents may have 'open' relationships with a steady partner wherein they regularly have sex with the same two or more partners (Sheeran & Abraham, 1994). The definitions of steady and casual partner as classified here do not seem to account for such a possibility. A related difficulty is the consideration of whether the categories of casual and steady partners can be truly conceptualised as discrete entities, as in reality there is surely a continuum, and as mentioned above transition, between different relationship types. Thus the

narrow categories of 'casual' and 'steady' may present difficulties for respondents if they feel their relationship is neither clearly one nor the other. Further attention needs to be paid to the terminology used to characterise partner type. It has been suggested that glossaries or clear definitions of terms might help reduce this problem (Sheeran & Abraham, 1994). It should be recognised however, that even with improved definitions, a degree of subjectivity in how respondents interpret the categories presented in terms of their own relationship(s) cannot be removed.

#### **4.12 Limitations of social cognition models in explaining sexual health behaviour**

Over the years a number of criticisms and limitations of social cognition models, which include the TPB, have been outlined. Social cognition models which aim to predict condom use, focus on individual rational decision making. Researchers have highlighted problems with the individualistic focus of these models, which neglect the social and cultural context. Ingham, Woodcock and Stenner (1991) state that insufficient attention is placed on affective processes, relational, social and cultural aspects of sexual activity. For example, although the TPB takes into account the perception of how significant others' would respond to the target health behaviour through the construct of subjective norm, this is arguably insufficient for both the complexity and pervading influence social, cultural and environmental factors have in their contribution to sexual behaviour.

There is growing recognition that existing models of individual decision making may require specific reframing in order to predict interactive behaviours such as condom use (De Visser & Smith, 2004; Fishbein, Hennessy, Yzer *et al.*, 2003; Wilkinson, Holahan, & Drane-Edmundson, 2002). As condom use involves more than one person, models of individual decision making ignore the essentially social and interactive nature of sexual behaviour. This poses challenges to models which may be better suited to behaviours which are not based on an interaction with another person, such as using sunscreen or brushing teeth.

Ingham and van Zessen (1997) also criticize the inference that there will be consistent and predictable links between attitudes, cognitions, behavioural intentions and actual behaviour. Many studies of condom use are based on the assumption that behavioural intentions are the immediate proximal cause of behaviour. The intention-behaviour link is central to the TPB. Ajzen and Madden

(1986) state that a strong association between intention and behaviour is dependent on three prerequisites:

- “the measure of intention must correspond in its level of generality to the behaviour;
- the behaviour under consideration [must] be under volitional control;
- the intention must not have changed in the interval between the time at which it was assessed and the time at which the behaviour is observed” (p.455).

To examine these prerequisites in relation to condom use, de Visser and Smith (2004) asked participants to complete a condom use diary after each episode of vaginal intercourse which included a number of measures including type of partner (casual or regular), whether their intention in action was to use a condom and whether they perceived that their partner's intention in action was to use a condom. The data supported Ajzen and Madden's (1986) first prerequisite. More specific measures of intention were better predictors of condom use, i.e., condom use was better predicted by partner-specific measures of prior intention than by a general prior intention. However the other two criteria were difficult to meet; for both men and women, condom use was predicted by a perception of the partner's intention in action and intention in action was a better predictor of condom use than prior intention.

The results highlight the importance of events which occur between forming a prior intention and having intercourse. The authors conclude that although individual intentions do influence condom use, condom use is also influenced by factors which operate after the formation of the individual's intention. The fact that condom use is an interactive behaviour, not entirely under the control of the intentions of one person, presents difficulties for the TPB.

### **The influence of trust, concern for partners' perception and gender roles on condom use**

A number of researchers (for example, Flowers, Smith, Sheeran *et al.*, 1997; Free & Ogden, 2005; Holland *et al.*, 1990; Hollway, 1989; Lear, 1995; Willig, 1997) have highlighted how sexual behaviour is influenced not only by individual factors, but also by structural, social and cultural factors. These factors are often intertwined to impact health behaviour among a population and include socioeconomic status, interpersonal interactions and networks, gender,

sexuality, norms and culture. MacPhail and Campbell (2001) assert that an individual focus presumes that sexual behaviour is the result of a rational decision-making process based on knowledge and that these efforts neglect to recognize that knowledge, attitudes, and behaviour are constructed and negotiated within social and cultural contexts.

### Trust

Research has demonstrated how the development of trust between partners is an important reason for why condoms are deemed unnecessary in a steady relationship. Trust has been found to be the most frequently cited response for not using a condom (Jadack, Fresia, & Rompalo, 1997). In stable relationships, condoms are regarded as inimical to trust, romantic love and physical intimacy (Sobo, 1995; Varga, 1997). Willig's (1992) discourse analytic study of 14 heterosexual adults revealed the importance of trust. Marriage and long-term, stable relationships were constructed as being incompatible with condom use, because of their association with safety and trust. For example, respondents often cited trust to justify a reluctance to use condoms; "this was done either by arguing that the existing trust in the relationship made it unnecessary to use condoms or, much more frequently, by suggesting that the request to use a condom would undermine trust and thus damage the relationship" (p.116).

### Concern for partners' perception

Previous research has identified that people may be concerned to suggest using a condom to a partner because of the impression such a suggestion may give (Afifi, 1999). As a result of education promoting the use of condoms to protect against STIs, proposing to use a condom can be believed to have several negative connotations. Metts and Fitzpatrick (1992) explain, "individuals sometimes believe that requesting condom use implies a personal promiscuous sexual past, implicates the sexual partner as having a STD and increases the possibility of rejection by a potential partner" (p.9).

Also, to suggest that a condom be used before sex, "may be seen as inappropriate or as 'jumping the gun'" (Afifi, 1999; p.200). A request that a condom be used is a direct indicator that sex is expected to occur, thus violating the context of ambiguity that typically surrounds initial sexual encounters. Studies have also shown that individuals are often unskilled at requesting condom use and find such requests embarrassing to both themselves and their partner (Afifi, 1999).



### Gender roles and sexuality

Condom use is typically a male-driven behaviour. Low perceived self-efficacy regarding using condoms and being able to convince a partner to use condoms account for a greater proportion of variance in condom use among women than men (Wendt & Solomon, 1995) and appear to be key factors in determining whether a condom is used (Libbus, 1995). Qualitative research has also highlighted that due to the societal and cultural expectations regarding acceptable behaviour for men and women, there are gender differences in terms of being able to suggest, carry and negotiate condom use. Many women feel unable to initiate discussion of condom use because of a general embarrassment around discussion of sex and the specific impact of cultural expectations of women not to take the initiative in sexual matters (Amaro, 1995; Holland *et al.*, 1990). MacPhail and Campbell (2001) explain,

“A high regard for the preservation of reputation means that young women adhere to social definitions of sexual encounters as initiated by men, against female resistance. Women, therefore, often do not have condoms available and make few efforts to gain knowledge of their partners’ sexual histories, as this would be tantamount to admitting to themselves and society that they plan to engage in sex. In addition, women often avoid carrying condoms due to the negative reputations and labels associated with women who actively seek sex (Hillier, Harrison, & Warr, 1998; Holland *et al.*, 1990)” (p. 1615).

The literature concerned with male sexuality also illustrates barriers for men in protecting their sexual health. It is argued that masculine sexuality classifies ‘normal’ men as being associated with multiple partners and power over women. The construction of a masculinity where men need to engage in multiple sexual relationships, combined with internalisation of negative attitudes towards condoms, place their sexual health at risk (Holland *et al.*, 1990; Wight, 1994).

### **Summary of the limitations of social cognition models**

This brief overview of some of the socio-cultural factors which influence sexual behaviour highlight the limitations with individualistic social cognition models which are parsimonious in their approach to understanding behaviour. Even proponents of social cognition models acknowledge their limitations in regards to sexual behaviour, “the individual decision making psychology implicit in belief-change models provide only a partial picture of the determinants of sexual behaviour (Abraham & Sheeran, 1993)” (Free, Ogden, & Lee, 2005, p.675).

DiClemente, Salazar and Crosby (2007) provide a critique of behavioural interventions which rely on individual-level models and propose a broader, ecological approach is required to increase the efficacy of sexual health

interventions. They draw attention to how individuals are influenced by proximal factors in their environment, such as peers, community, family and sexual relationships and how these proximal factors are embedded within distal influences of society such as economics, tradition, norms, laws and mores. It is argued that an ecological approach, which would involve designing concurrent interventions aimed at multiple relevant, modifiable levels, may provide a more effective strategy for influencing factors necessary to effect long-term behaviour change. Such an approach has been successfully implemented in Brazil in response to the AIDS pandemic, which resulted in incidence rates of HIV being much lower than projected and saw mortality rates decrease by 50% (Berkman, Garcia, Munoz-Laboy *et al.*, 2005).

#### **4.13 Current sex and relationships education (SRE) in schools**

It is important to place the current study in the wider context of the quantity and quality of SRE provision in English schools. At the time of writing, it is compulsory for schools to teach the biological aspects of puberty, reproduction and the spread of viruses as part of the Science National Curriculum. However the broader subject of SRE is not compulsory.

The UK Youth Parliament (2007) surveyed 21,602 people under 18 about their experience of SRE in schools across the country. Nationally 40% of young people between the ages of 11 and 18 thought that their SRE was either poor or very poor, whilst a further 33% thought it was average. 61% of boys and 70% of girls over the age of 17 reported not having received any information about personal relationships at school. Despite the Government's recommendation that, "Sex and relationship education should inform young people about condom use and safer sex in general" (Department for Education and Skills, 2000), the survey found that 55% of all 12–15 year olds, and 57% of girls between the ages of 16–17 had not been taught how to use a condom. The report recommended that SRE should be an entitlement for all and made statutory.

In "Time For Change? Personal, Social and Health Education" OFSTED (the Office for Standards in Education, Children's Services and Skills) (2007) reported,

"Many young people say that parents and some teachers are not very good at talking about the more sensitive issues in PSHE [personal, social and health education], such as sex and relationships ... In the case of SRE young people do not want just the biological facts but want to talk about feelings and relationships (p.10-11)."

Inspectors found that teachers, governors and parents have not received sufficient guidance and support to help them talk to young people about sensitive issues.

Evidence is growing that good SRE delays the onset of sexual activity (Kirby *et al.*, 2007) rather than hastening it, as feared by some parents and fuelled by some media reports. In October 2008, the government published its response to a review of SRE by the SRE review steering group (Department for Children Schools and Families, 2008). There was a clear view from the steering group that making PSHE (of which SRE is a part) statutory was essential. The group was clear that PSHE was not given sufficient priority in many schools and that its lack of statutory status was a key reason for this. In response, the government stated that they are “attracted to giving PSHE statutory status, and in consequence of this, introducing statutory programmes of study for PSHE” (p.4). The government also agreed to update the existing SRE guidance, issued in 2000. The new guidance will set out the topics to be covered and a common core of information to ensure greater consistency in the SRE provided by schools. Thus although not statutory at the time of writing, this is clearest indication to date that the government intends to give PSHE statutory status. In doing so, this should improve the quantity and quality of SRE provided to young people.

#### **4.14 Conclusion**

##### **Application of health psychology in an evidence based NHS**

This study investigated a sexual health promotion DVD which rarely are the subject of rigorous evaluation. In the last two decades the NHS has become more concerned with the use of evidence based practice as indicated by various developments, such as the publication of a research and development strategy, ‘Research for Health’ for the first time in 1991 (Department for Health) and the establishment of the National Institute for Clinical Effectiveness (NICE) in 1999. In recent years, NICE has produced guidelines around one to one interventions to reduce the transmission of STIs and the rate of under 18 conceptions (National Institute for Clinical Excellence, 2007) and more generally on interventions designed to support attitude and behaviour change at population and community levels (National Institute for Clinical Excellence, 2007). Health psychologists, with their training in research methods, are in an ideal position to be able to evaluate health promotion initiatives and assist public health practitioners and commissioners to develop and evaluate health campaigns

such as the intervention described here and contribute to the growing evidence base.

### **The findings in the wider context of sexual health interventions for adolescents**

Although this study found no impact, other studies suggest that DVD and music interventions *can* be effective in adolescent populations both in school (e.g., Lemieux *et al.*, 2008) and clinic settings (e.g., Downs *et al.*, 2004). Further research is needed to identify the factors necessary in interventions of this type to demonstrate positive outcomes.

The results of this study need to be placed in the wider context of research into sexual health education in school settings, which have reported mixed success. One of the best designed research trials to date of an enhanced programme of SRE in the UK, SHARE, was no more effective than conventional provision in overcoming the strong socioeconomic and cultural influences that shape rates of teenage conception and termination. The authors concluded,

“The impact of a 20 period school sex education programme might be unimportant compared with long term and pervasive influences from, for instance, family, local culture and the mass media. Skills based exercises in 40-80 minute lessons might be too short to develop sexual interaction skills and too distant to be remembered when needed” (Wight *et al.*, 2002 p.1434).

The teenage pregnancy rates in the SHARE study mirrored the picture nationally with a strong relationship between the conception rate and socio-economic status. The findings of a large scale trial of peer led sex education, RIPPLE, mirrored the conclusions of the SHARE study, with no significant effects found on abortion rates or live births. The authors concluded “More effective programmes may have to address socioeconomic divisions in society and the importance of parental influence” (Stephenson *et al.*, 2008; p.1584). The link between teenage pregnancy and social deprivation is well documented (Social Exclusion Unit, 1999).

However there is also evidence supporting the value of SRE. Improving SRE at school is a key theme of the Teenage Pregnancy Strategy. The report ‘Teenage Pregnancy: Accelerating the Strategy to 2010’ (Department for Education and Skills, 2006) presented the results of intensive reviews of statistically similar areas, with contrasting rates of progress, in terms of their teenage pregnancy rates and identified the key factors in successful areas. The report identified that one of the factors present in high performing areas was “A high priority given to

PSHE in schools, with support from the local authority to develop comprehensive programmes of SRE in all schools” (p. 14).

This is supported by a finding of the 2001 Guttmacher Institute report, which drew on data from 30 countries in Western and Eastern Europe and concluded,

“Societal acceptance of sexual activity among young people, combined with comprehensive and balanced information about sexuality and clear expectations about commitment and prevention, childbearing and sexually transmitted diseases within teenage relationships, are hallmarks of countries with low levels of adolescent pregnancy, childbearing and STDs” (Darroch, Frost, & Singh, 2001 p.5).

SRE cannot be considered in isolation; the social context in which sexual relationships take place is of overriding importance. It is well documented that certain groups are disproportionately affected by poor sexual health. In addition to the clear evidence demonstrating the important influence of socioeconomic factors on teenage conception rates, STI rates have been shown to vary by ethnicity (Health Protection Agency, 2007; Low *et al.*, 2001) and sexual orientation, with young men who have sex with men showing higher rates of STI infection (Health Protection Agency, 2007). To have a stronger impact on the sexual health outcomes for young people, complementary interventions should be considered which address health inequalities and the wider determinants of health.

Evidence from reviews of sexual health interventions in adolescents report that interventions with a wider scope are emerging as promising approaches to reducing sexual risk behaviour, for example those that are more “generally targeted toward increasing youth resiliency and competencies” (Robin *et al.*, 2004, p.18). In their review, Sales *et al.* (2006) concluded that,

“interventions that went beyond STI education to include an emphasis on psychological correlates of risk were effective at decreasing STI risk behaviour. For example, interventions that included broader based content, such as problem solving, capacity building, social skill building and enhanced gender and ethnic pride, had the greatest impact on behaviour” (p.433).

Thus a programme of PSHE that is greater in scope and duration, holistic in nature and aims to change future life opportunities for young people may serve to be the most effective (Henderson *et al.*, 2007; Robin *et al.*, 2004; Sales *et al.*, 2006; Wight *et al.*, 2002).

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# **SECTION C: PROFESSIONAL PRACTICE**



## **Core Competence 1: Generic Professional Competence**

Supplementary Report



## **1.1 Implement and maintain systems for legal, ethical and professional standards in applied psychology**

### **1.1a To establish and maintain systems for the security and control of information**

In my role as a Stop Smoking Advisor it was very important to establish and maintain systems for the security and control of information. To protect the confidentiality and security of client information, the Stop Smoking Service database, where personal details of clients were stored, had a differentiated access system. Client information could only be accessed by members of the Stop Smoking Service. I ensured that paper based records containing client information were stored in a locked cabinet and the key was held in a safe place. These procedures were to ensure that potentially sensitive information was securely stored, to safeguard the confidentiality of its contents.

When seeing clients, it was necessary to explain confidentiality in terms they understood. I explained to all clients that their information would be held on a secure database and kept confidential, meaning only members of the Stop Smoking Service would have access to the information. I explained that information would be used to monitor the effectiveness of the Service as required by the Department of Health. I also explained that the only circumstances in which information may be shared, without consent, is when there is concern of significant harm either to themselves or others. Explicit agreement of this was obtained by acquiring written consent.

I have further developed my competence in this area in my present role as Health Improvement Specialist, where I am involved in the National Child Measurement Programme (NCMP). The NCMP is a Department of Health initiative, requiring all children in reception (aged 4-5) and Year 6 (aged 10-11) have their height and weight measured. The NCMP also requires collection of other personal data, including name, school, gender, date of birth, ethnicity and post-code. This is thus sensitive information, where security and confidentiality is of paramount importance. I have ensured that the IT equipment used to collect and store the data are encrypted in order to safeguard confidentiality.

In my role as supervisor to two Health Care Assistants who were delivering stop smoking advice to clients within general practice, I ensured they were aware of their roles and responsibilities regarding confidentiality and aware of relevant policy, for example informing them of the NHS Confidentiality Code of Practice (Department of Health, 2003). I provided guidance for ensuring patient data is

kept confidential, for example, stressing the importance of making sure they always clear the computer screen of a previous patient's information before seeing another client.

When I was a Stop Smoking Advisor, I was required to transport client records. I felt uncomfortable with this in terms of client confidentiality because the records contained client identifiable information (i.e., name, address, postcode and date of birth) and should anything happen to the records, confidentiality would not be protected. This led me to review existing procedures alongside colleagues in the Stop Smoking Service. It was decided that in order to protect confidentiality, after the first session, clients' identifiable information would be removed from their monitoring form and replaced with a sheet containing only their initials and client number.

It was also necessary to review existing procedures of transportation and storage of client information after evening sessions. Due to late finishing of evening groups, I would take home client files and return them to work the following day. A City University training course entitled 'Generic Professional Skills - Ethical and Legal Issues' led me to reflect on this procedure. The NHS Confidentiality Code of Practice states "staff should not normally take patient records home" (2003; 18). This led me to obtaining a key for a locked cabinet at the health centre where the group session was held so client data could be stored securely overnight. Thus my learning acquired during my training resulted in a change in my professional practice.

In my research and practice, I am aware that information sources should remain anonymous unless agreed. For example, there is no personal identifiable information of clients in my practice log or participants who took part in my research project in my thesis.

#### 1.1b To ensure compliance with legal, ethical and professional practices for self and others

The systems I use for maintaining and monitoring my professional practice include regular one-to-one supervision and group supervision with Stage 2 Trainees. The Stage 2 workshops provided a useful opportunity to discuss issues concerning legal, ethical and professional practice. Supervision provided space in which to reflect and review current monitoring systems.

At my workplace, I utilise appropriate systems for monitoring professional practice, such as the appraisal system. I have regular meetings with my line

manager, in addition to a yearly appraisal, mid-year review and a Personal Development Plan (PDP).

As Michie (2004) describes, a professional health psychologist needs to be,

“well informed of the political, social and legislative context of their work including national and regional health policies, relevant legislation and the codes of ethics and conduct (especially those of their own professional and/or licensing body)” (p.376).

I am aware of the importance of the British Psychological Society's (BPS) Code of Ethics and Conduct (2006), and am committed to the ethical principles of Respect, Competence, Responsibility and Integrity, which structure the Code and the values which underpin these principles. Many aspects of the Code were relevant to the implementation of my research with school students, for example, the principle of Respect underlines the importance of confidentiality, informed consent and the right to withdraw at anytime from participation. I ensured that the information sheet clearly outlined that participation was voluntary, confidential and that they could withdraw at anytime. Participants were asked to sign a consent form which stated exactly what would be involved if they chose to participate in the research.

I am a member of the BPS and within this a member of the Division of Health Psychology (DHP) and find these websites to be useful reference points. The magazine produced by the DHP, “Health Psychology Update” has also been a helpful resource to maintain up-to-date with developments in the profession. I have found DHP continuing professional development (CPD) events incredibly beneficial in meeting other trainees and keeping up-to-date about professional developments in health psychology.

Part of my role previously was to provide advice to Level 2 Stop Smoking Advisors. Level 2 advisors are typically health professionals in primary care, primarily practice nurses, but also other professionals including pharmacists, health care assistants and public health assistants. I ensured they were aware of their roles and responsibilities in relation to maintaining and reviewing professional practice. I did this through ensuring the Level 2 advisor understood what was required of them as outlined in their Service Level Agreement with the Stop Smoking Service. For example, in order to maintain their clinical skills, Level 2 advisors were required to provide regular support to quitters throughout the year (suggested a minimum of 5 clients per quarter), attend update training



every six months and keep in regular contact with the locality Stop Smoking Advisor (i.e. myself) to discuss any problems in service delivery<sup>1</sup>.

#### 1.1c To establish, implement and evaluate procedures to ensure competence in psychological practice and research

Whilst employed as a Stop Smoking Advisor, I was asked to supervise two Public Health Assistants (PHAs). My work supervising the PHAs allowed me the opportunity to identify the strengths and weaknesses of staff carrying out psychological work<sup>2</sup>. During supervision sessions I discussed with them their clinical work and identified training needs, for example, it became apparent during supervision that a development need was training around relapse prevention.

To ensure that my records of personal capabilities, qualifications and competence are accurate and up-to-date, I regularly review my CV and keep a CPD log which details all the training and conferences I have attended as well as conferences at which I have presented<sup>3</sup>.

I identify the strengths and weaknesses of my current practice through raising issues in supervision and gathering feedback from others. The practice logbook permitted an opportunity to reflect and compare my psychological practice with established competencies. I have undertaken appropriate action to deal with weaknesses identified, for example, I had a development need around delivering training. I identified relevant training courses (e.g., a 10 day course at the Sheffield Centre of HIV and Sexual Health) which were very beneficial to develop my ability and confidence.

#### Reflection

My experiences of working directly with clients and having responsibility for confidential information, implementing the NCMP and supervising others' coupled with the supervision I have received, have enabled me to acquire competence in the implementation and maintenance of systems for legal, ethical and professional standards in applied psychology. Whilst in many ways my work placements have been very different, I have found that this competency is indeed generic, and I have transferred my learning from one setting to another.

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<sup>1</sup> more information can be seen in case study, 5.2 'Direct the implementation of interventions'

<sup>2</sup> see practice log August and September, 2005 for further information

<sup>3</sup> The CPD log can be seen in the practice log

For example, my knowledge of seeking informed consent and data protection which I acquired from conducting psychological research has been useful in the context of the NCMP, when I was required to consider carefully the security and confidentiality of information and acquiring informed consent.

## **1.2 Contribute to the continuing development of oneself as a professional applied psychologist**

### **1.2a Establish, evaluate and implement processes to develop oneself as a professional health psychologist**

During my training, I used a variety of methods to engage in CPD. These included supervision and attending conferences, training courses or other forms of learning (for example, observation) to meet needs identified.

I employed methods of self-evaluation and a reflective approach when completing the practice logbooks. I also reflected on my practice for each of the case studies. This provided an opportunity for me to consolidate learning, identify strengths and weaknesses and determine future learning needs.

I attended a number of conferences, at some of which I presented my work. For example, I presented my MSc research thesis at the Division of Health Psychology conference in 2004, and my systematic review at the UK Society for Behavioural Medicine Conference in 2006 and at the Division of Health Psychology Conference in 2007. I also presented at the Psychology Post-Graduate Affairs Group (PSYPAG) conference in 2006 in order to acquire feedback on my research proposal.

I have identified and acquired various resources for my own psychological practice, such as accessing relevant journals such as the 'British Journal of Health Psychology' and 'Journal of Health Psychology' and resources beyond the psychological literature, such as NICE guidance, and Department of Health publications.

### **1.2b To elicit, monitor and evaluate knowledge and feedback to inform practice**

As a Stage 2 trainee I sought feedback regularly via a variety of sources, particularly from my supervisor on aspects where I was uncertain. I have regularly delivered teaching and training to professionals and students<sup>4</sup> and always collect feedback from participants. Participants' feedback can be seen in

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<sup>4</sup> a document outlining the sessions I have delivered can be seen in the practice log

my teaching and training and generic practice logs. Seeking feedback provided a mechanism to monitor and evaluate my own practice to establish its effectiveness and enhance my competence. For example, in my teaching delivery of smoking cessation to MSc Health Psychology students at University College London, a suggestion on the feedback form for improvement was to provide case studies and real life examples. I incorporated these suggestions in future teaching by adding a case study and showing a video which demonstrated a role play between an advisor and a client. The changes were well received when I repeated the lecture.

#### 1.2c Organise, clarify and utilise competent consultation and advice

I sought advice from a number of sources including work colleagues, line manager, health psychology supervisor, DPsych Course Director and peers. When deciding the topic of my systematic review and research thesis, I identified that a valuable source of consultation would be researchers in this area. For example, for my systematic review I wanted to explore the area of obesity. One of my initial steps was to explore existing reviews. From my search I located two key researchers in this field who had written Cochrane reviews in the area of obesity. I contacted them both and found this really helpful in terms of discussing my ideas and getting their feedback which helped shape the title of the review.

I also sought the advice of researchers when planning my research. My MSc project had been a qualitative study. However for my DPsych research, I planned to carry out a large scale experimental study requiring quantitative analysis and I found this prospect daunting. The area of most unease was the statistical analysis. To address this I identified a number of sources of consultation, including the “Stats Clinic” provided at City University, a post-graduate research psychology e-mail list as well as relevant books such as Field (2005) and Pallant (2005).

#### 1.2d Develop and enhance oneself as a professional health psychologist

To evaluate opportunities to extend and develop my professional competence, I used sources to locate relevant training opportunities and material that would help me develop as a health psychologist. For example, I identified that I would like to extend and develop further my competence in clinical skills. I discovered a two day workshop run by ‘The British REsearch And Training in HEalthPsychology’ (BREATHE) initiative entitled ‘The path less travelled:

Clinical skills and the Health psychologist'. I negotiated with my line manager that this would enhance my professional development and was able to attend.

BREATHE hold annual conferences. I was asked to present at the 2008 conference, which was entitled 'Health Psychology: Applications'. The organisers had brought together four health psychologists who were working in applied settings. I gave a 25 minute talk about my journey so far to becoming a health psychologist. I very much enjoyed the opportunity to meet with other trainees and learn about others experiences of applying health psychology.

I have taken steps to ensure others have an informed view as to the roles and responsibilities of health psychology trainees. I have done this by explaining the requirements of the course, for example, that I will acquire competence in six areas.

#### 1.2e Incorporate best practice into one's own work

It has been very important to seek and identify sources of new and emerging knowledge and best practice in order to keep my skills up-to-date and to be credible to both clients and professional colleagues. For example, when I was advising people to stop smoking, it was important to be aware of the research evidence in this field in order to give clients and professionals the most up-to-date advice and to be able to answer queries, for example they may have seen recent research or become aware of drug trials through the press. I did this through being familiar with national guidance and seeking out sources of new knowledge, for example I attended the National Smoking Cessation Conference. I have ensured that I have attended appropriate professional networks where possible, for example, the CPD events for Stop Smoking Advisors in the North Central Sector and presently the London Leads Obesity meetings held by Government Office for London.

#### Reflection

Since embarking upon my health psychology training, I have been committed to developing myself as a professional applied psychologist and completing the requirements of the training programme to the highest standard I am able to. I have also been committed to developing health psychology within public health and health promotion, for example I have offered work placements for MSc Health Psychology students from London Metropolitan University.

My work has covered a range of different areas including smoking cessation, sexual health, childhood obesity and healthy schools. Thus predominantly my

applied practice has been in health promotion and public health within healthcare.

I have found my training very demanding in terms of combining a full-time job and my studies. In addition to working full-time, I have also had an additional job as a sexual health education outreach worker. I identified that my workload was a threat to my physical and emotional well-being and it has been necessary to review working practices on a number of occasions. For example, when I first began my training I did not set time aside during the working week to complete the competences and logbooks and I became aware that I would not be able to complete the training by only working in the evenings and weekends. Subsequently I negotiated study leave with my line manager. This was far better as it meant I had dedicated time to be able to fulfil the training requirements. Peer support has been an invaluable coping strategy. Although I have been challenged by the volume of work required, now reflecting on my journey to chartered status, and the skills, knowledge and experience I have demonstrated through my portfolio of work, I feel an immense sense of achievement.

### **1.3 Provide psychological advice and guidance to others**

#### **1.3 a Assess the opportunities, need and context for giving psychological advice**

As a Stop Smoking Advisor I provided advice to clients to help them stop smoking both individually and in groups. I delivered advice to clients most frequently face-to-face. Face-to-face contact was the most appropriate form of delivery as evidence demonstrates clients are more than twice as likely to quit with face-to-face advice compared to proactive telephone support (West, McNeil, and Raw 2000).

I also provided advice to health professionals (for example health care assistants, practice nurses and pharmacists). These are key professionals who need to be supported to give psychological advice because most interactions between smokers and the health care system occur within primary care. It also became apparent to me that health professionals often have limited knowledge and experience of helping people stop smoking so it was very important that I supported them to provide psychological advice.

In my position as Health Improvement Specialist, I am involved in a childhood obesity intervention, which is a family based healthy lifestyle programme. The intervention is facilitated by a dietician and physical activity facilitator and I recognised this as an opportunity to offer advice on psychological issues. In

order to do this, I investigated the research literature regarding childhood obesity interventions, sought advice from my supervisor, attended a relevant training course and observed some of the intervention sessions. It was important to ensure the advice was presented in a format appropriate to the context and clients, which in this instance were children and their families. I chose to incorporate some structured goal setting which I tried to make “child friendly”, for example I devised a goal setting sheet with pictures on (see generic professional practice log, April 2008) and utilised a sticker chart to reward children for attending the sessions and successfully completing their goals.

### 1.3 b Provide psychological advice

I undertook various activities to ensure the advice I provided to clients was up-to-date and evidence based such as regularly carrying out literature searches. I also used opportunities to discuss my practice with other health psychology trainees working in the same field and key researchers in this area.

Advice was given within a structured programme of activity, for example, group sessions were run at the same time and place for one hour over a period of seven weeks. Smokers were asked to have their last cigarette just before the third group meeting. This enabled me to take clients carbon monoxide reading immediately and provide psychological advice and support at a time when many individuals are anxious about quitting.

I had the opportunity to work with clients in different settings, for example, delivering groups in health and community centres and also delivering one-to-one advice in a large GP practice. This enabled me to develop my communication skills as I was interacting with a wide variety of individuals with different backgrounds and smoking habits. I needed to convey complex information to clients, for example, about the correct use of pharmacotherapy and how biological aspects of nicotine addiction interact with psychological aspects, for example, dealing with cravings in places where individuals typically smoke, such as the pub.

### 1.3 c Evaluate advice given

I used a number of strategies to monitor progress and adjust the content of my advice accordingly. I used monitoring data which included carbon monoxide readings (which gives an indication of dependence to nicotine and provides an objective verifier of smoking status), number of cigarettes smoked in the last

seven days and talking to clients to establish how they were feeling and their experiences of quitting.

Data from the groups was entered into a database to evaluate the impact of advice given. The data revealed the average quit rate for the Stop Smoking Groups was 66%. This figure is similar to the rate reported by Hajek (1994) of 68%. Data from Level 2 advisors (for example, practice nurses, pharmacists) revealed lower success rates. The quit rate for primary care was 42% and pharmacists was 48%. This data is based on four week figures, i.e., quitters who have managed not to smoke a single cigarette since their quit day, which is defined by the Department of Health. This data suggests that psychological advice is best delivered within a group setting with the aid of a dedicated Advisor.

### Reflection

My confidence in providing psychological advice to others increased dramatically during the course of my training. Prior to my post as a Stop Smoking Advisor I had limited experience of providing psychological advice and guidance to others in a one-to-one setting and had no experience of facilitating groups. Initially I was daunted at the prospect of being the facilitator for a large group, which could be up to 30 individuals. However my experience and confidence quickly developed and I soon became comfortable with this situation. Similarly, initially I was anxious about training groups of health professionals and talking to GP's about helping people stop smoking, but again I developed assurance in doing this and realised that I enjoy providing advice and supporting others. Further information of my work in this area is provided in my two optional competencies (5.1 'Implementing Interventions' and 5.2 'Directing Interventions').

### **1.4 Provide feedback to clients**

As a Stop Smoking Advisor, I provided feedback to a variety of professionals who had been trained to deliver Level 2 stop smoking advice. To demonstrate my learning and competence in this unit, I discuss giving feedback to public health assistants and health care assistants for whom I provided supervision.

#### Public Health Assistants (PHAs)

The PHAs provide support to people, targeting those from disadvantaged groups, to help them change health behaviours in the areas of smoking, healthy

eating and physical activity. I provided health psychology supervision to two PHAs in the form of one hour sessions on a monthly basis. I also facilitated group supervision for the PHAs jointly with another health psychology trainee and a Chartered Health Psychologist. This took place for two hours on a monthly basis. At one of these training sessions, the PHAs took part in a role-play of a session where they were rated on their strengths and weaknesses by four of their peers, myself, another health psychology trainee and a Chartered Health Psychologist.

#### Health Care Assistants (HCAs)

I worked with two HCAs at a GP practice that had been trained as Level 2 advisors. I observed their work for several weeks and provided feedback to help them develop competence as community advisors.

#### 1.4a Evaluate feedback needs of client groups

Both the PHAs and HCAs were undergoing an intense learning programme. The purpose of my feedback was to help them develop their clinical skills in working with clients. It was necessary to identify their feedback needs, for example, they required feedback and instruction on various aspects of delivering interventions. It was necessary to show sensitivity to the situation and be aware of possible limitations of clients' prior knowledge, as my clients did not have a background of working in healthcare. As a result I was careful not to use jargon and deliver instruction in a clear manner.

#### 1.4b Prepare and structure feedback

To prepare and structure feedback, I undertook further reading. Hawkins and Shohet (2000) advise a mnemonic of how to give good feedback, termed CORBS: clear, owned (the feedback you give is your own perception, not an ultimate truth), regular, balance (balance positive and negative points) and specific. I found these simple guidelines helpful in structuring the feedback session. I prepared materials by writing a report for the HCAs in order to facilitate their understanding of the feedback (see generic practice log August & September, 2005).

I thought it important to deliver feedback face-to-face in order to be able to pace the presentation of information appropriately and respond to clients needs.



#### 1.4c Select method of communicating feedback

For the PHAs, the methods of communicating feedback included verbal communication face-to-face, a written report and video tape of the role play on which their feedback was based. The HCAs were given verbal feedback and a written report. The purpose of the feedback was for the clients' development, particularly focusing on their skills working with people on various health behaviours (PHAs) and delivering stop smoking advice (HCAs). I organised an appropriate situation and context to give feedback by arranging to deliver the feedback on an individual basis at a quiet, private location at their workplace.

#### 1.4d Present feedback to clients

In order to maintain sensitivity to clients' reception and needs during feedback, I used non-verbal signals as cues (i.e., their body language and facial expressions) and asked 'how do you feel about that?' at various points. I tried to create a relaxed atmosphere to facilitate open, honest discussion. After reading around the area, I devised a plan for the feedback session (see generic practice log, August and September, 2005). In order to monitor and evaluate the degree of clients' understanding, assimilation and acceptance, I asked questions such as, 'what do you understand by this comment?' and 'do you agree?' At the end, I evaluated the feedback session. Following suggestions by van Ooijen (2000), I evaluated it in terms of the outcomes, by asking 'What do you feel you have achieved in this session?' and feedback processes, 'How useful has this session been for you?' and 'How could I make it better for you next time?' (responses can be seen in the generic practice log, August and September, 2005).

#### Reflection

To illustrate my practice, I chose to focus on providing feedback to allied health professionals. During my training, I also acquired experience of providing feedback to other groups, including stop smoking clients, children and their families as part of a childhood obesity intervention and to an MSc Health Psychology student as part of their work placement. At the start of my training I had never previously provided feedback to clients. My training has helped me identify my preferred areas of work and I have realised that I enjoy supporting others' to develop. I hope to continue this in my career as a health psychologist.

### **Reflection on the professional journey to chartered status**

At the final stage of putting my portfolio together, it is only now I can truly appreciate how much I have accomplished and the challenges I have overcome. My interests in many different areas of health psychology have led to a diverse portfolio. During the period of my supervised practice, I held three different full-time positions. Each time I have taken on a new job role it has been demanding and it has also provided an opportunity to add breadth and depth to my skills and knowledge as a health psychologist.

Through a number of mechanisms, such as supervision and discussion with peers, my training has helped me increase my self-awareness. I have learnt that I am hard working and conscientious, but that I can lack confidence, and doubt my skills and capabilities often unnecessarily. Whilst I still believe I can sometimes lack confidence in some areas, I see also how my confidence has developed dramatically since I started my training. For example, at the beginning of my training I would not have had the confidence to be a line manager. However as part of my current job I am required to line manage and am pleased I have the opportunity to have this responsibility. My training has provided me with many opportunities to experience situations initially outside my comfort zone, for example running groups, training professionals and being the lead for large projects. On reflection, whilst I was often initially anxious and uncomfortable, I realise it is only through undertaking such tasks that I have been able to develop and grow, such that they are no longer daunting but now comfortable and often enjoyable.

At the end of October 2006 my step-father was diagnosed with terminal cancer, with only weeks to live. He died at the beginning of February, 2007. This period, and for sometime after, was a difficult and stressful time in my personal life, requiring considerable re-adjustment. It was a difficult decision, but I decided to suspend my training for just over one year. Although at the time I wondered whether I made the right decision as I was reluctant to cease my training, on reflection it was the right decision as my time and energy were needed elsewhere. This experience taught me that the balance between personal and work commitments is not static, but must be flexible as it is necessary to adapt to what can be very unpredictable and challenging circumstances. It also taught me the importance of being able to know yourself and your own limits about what is, and is not possible, and how important it is to be able to seek advice and support in times of difficulties.

In many ways my research, which involved comparing a sexual health intervention with a control condition in secondary schools, was the most difficult and demanding aspect of my training. Carrying out a real world research study, presented a number of challenges and required considerable planning and organisational skills. It entailed data collection at two sessions, four weeks apart. Due to the number of participants required, I needed assistance with the data collection and delivery of the intervention. I approached a number of professionals, including school nurses and health promotion specialists. I needed to be persuasive as I was asking for help with a project that would be additional to their existing workload. I was able to recruit a bank of 14 professionals who volunteered to assist me.

An unforeseen difficulty with executing the data collection was unreliability on the part of the largest school participating in the study. Although agreeing to the stipulations required of them (i.e., they would arrange two sessions, four weeks apart), the school did not arrange for a specific period in their time-table for data collection at follow-up. As a result, the only available opportunity to collect the follow-up data was tutorial time, which occurred at the beginning of the school day. Attendance at tutorial time was extremely poor. As a result, of the 91 students who had been present from this school at baseline, data from only 23 students were collected at follow-up. A huge amount of work had been undertaken to carry out the project in this school and I was really disappointed and frustrated with the school for not honouring their commitment to provide a follow-up session. I was also annoyed with myself for not ensuring they committed to a specific date when initially negotiating the project. I felt frustrated due to the power imbalance of the situation. As I was dependent on the school, as opposed to visa-versa, it was difficult for me to control the situation which had high stakes for me. I learnt a lot from this experience, such as that it is important to have contingency plans as problems may occur at any stage, resulting in delays or requiring a re-think of the project plan.

Despite being the most challenging aspect, my research was also the most rewarding and I feel my greatest achievement. It required a myriad of skills, including teaching and facilitation skills with young people on a sensitive topic and professionalism and persuasiveness to both engage schools and gain assistance from colleagues. It was during my research when I was able to utilise my skills and experience of academic health psychology together with my work in applied settings that I found the two complimented each other perfectly to produce a piece of work I am proud of.

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### **Core Competence 3: Consultancy Competence**

Development, implementation and evaluation of You're Welcome (Department of Health, 2007); A young people friendly accreditation scheme for health services



## **Introduction**

This case study will focus on how the consultancy was set up, delivered, monitored and reviewed. It provides an account of the development, negotiation, review and evaluation of a consultancy contract using relevant theoretical frameworks.

## **3.1 Assessment Of Requests For Consultancy**

### **Context of the consultancy**

Westminster Primary Care Trust (WPCT) came into being on 1 April 2002. It is an NHS body responsible for health services in Westminster. It shares its geographical boundaries with the City of Westminster, extending to Regent's Park in the north, Hyde Park in the west and Covent Garden in the east. The southern boundary follows the north bank of the River Thames. The PCT delivers services to 220,000 residents, however there are a million people who live, work and visit Westminster daily.

WPCT co-ordinates independent primary care services, including 53 GP practices (123 GPs), 82 dental practices and 100 community pharmacists. It employs all the district nurses, health visitors, school and other nurses who work in Westminster and nearly all the NHS speech and language therapists, physiotherapists, occupational therapists, psychologists and podiatrists.

### **3.1a Identifying the needs and expectations of the client**

I was approached by the Service Development Manager (Children and Young People's Services), at WPCT to provide consultancy to develop and implement a young people friendly accreditation scheme for NHS services (sexual health clinics, contraceptive services and GP practices), in order to increase their accessibility to young people. The initiative formed part of the Trust's Teenage Pregnancy Strategy, Sexual Health Strategy and the Children and Young People's Plan. The latter is a 3 year plan held jointly between WPCT and the local authority, Westminster City Council.

### **Initial meeting: Identifying the needs and expectations of the client**

I had an initial meeting with the client in October, 2005 to identify their requirements, needs and expectations and determine the appropriate level of intervention. This was an opportunity to ask questions of the client in order to ascertain their expectations and begin discussions about developing this piece of work.



During the course of our meeting it became apparent that the client saw the initiative affecting GP practices, sexual health clinics and contraceptive services and thus the nature of the intervention would be at the service level, primarily affecting primary care. At this meeting, it was agreed that the next stage would be for me to familiarise myself with relevant policy documentation and to review relevant academic literature, including psychological, health promotion and general practice literature. At this meeting, the client's initial priorities were clarified:

- 1) establishment of a multi-agency working party to oversee the project;
- 2) development of the criteria which services would need to meet in order to be accredited with "young people friendly" status.

My initial tasks were to work on these priorities. This pattern of events reflected a typical pattern of consultancy, as Schein (1999) explains,

"If the initial contact is perceived to be helpful, the contact client and the consultant *together* will plan the next step, which usually involves intermediate clients or direct involvement with the primary client. In the ideal situation the contact client is the primary client (p. 71)...Once the primary client is clearly identified, the consultant must engage in an active exploratory inquiry process with that individual...Getting information directly from the primary client not only guarantees accuracy, but, more importantly, begins to build a relationship that allows the consultant and the primary clients to work together to diagnose the situation and develop further interventions" (p.75).

In this consultancy, the contact client was also the primary client. Following Schein's (1988; 1999) model of 'Process Consultation', I undertook the process of identifying clients according to the descriptions he provides.

#### Identification of the Clients:

- 1) *Contact client*: Service Development Manager for Children and Young people, who approached me initially to discuss providing the consultancy.
- 2) *Intermediate clients*: members of the "You're Welcome" working party involved in the development of the project (see key personnel under section '3.2' below).
- 3) *Primary client*: the individual who ultimately owns the project. In this instance the primary client is the same as the contact client.
- 4) *Unwitting clients*: professionals who work in the GP practices, sexual health clinics and contraceptive services in WPCT where this initiative will be implemented.

5) *Ultimate clients*: the young people who use Westminster services and whose welfare and interests need to be considered in the planning, development and evaluation of the consultancy.

6) *Involved non-clients*: Schein (1999) notes,

“in any change effort there may be individuals or groups who are aware of what is going on, who do not fit any of the above client definitions, and whose interests may be to slow down or stop the helping effort. In any social and organisational setting there will be political issues, power plays, hidden agendas, and conflicting goals that the helper must be aware of in planning and executing various interventions” (p.65).

In initial meetings with key personnel, I became aware that the Director of one of the service providers became defensive when I discussed providing specific services for young people, particularly young men. This individual felt that the presence of men in contraceptive services would be intimidating for women and was not keen to encourage young men into their service. This service was not involved initially and for this consultancy, is identified as an ‘involved non-client’.

Earll and Bath (2004) point out the need to identify the ‘stakeholders’ and the ‘sponsor’. *Stakeholders* can come from a wide group of people and organisations who are related to the client and whose involvement with the organisation will impinge on its success in both undertaking and implementing the outcomes of the work. For this consultancy, the stakeholders are the service providers, such as the sexual health clinics and GP practices, who may have reservations about the validity of this piece of work and the time needed for its implementation when services have national targets to work towards, for example, the Department of Health was asking Genito-Urinary Medicine (GUM) clinics to work towards meeting a 48 hour access target. The *sponsor* is the person who will act as the main point of contact for the consultant and who will facilitate the necessary access and permissions needed to proceed with the work. In this case, the sponsor is the Service Development Manager.

### 3.1b Background and literature review

A significant public health concern in the UK is the high rate of unplanned teenage pregnancies, which are the highest in Western Europe (Teenage Pregnancy Unit, 1999) and rate of sexual transmitted infections (STIs) in young people. STIs have been almost continually rising since the 1990s and figures show the highest increase for both sexes is in young people. Data demonstrates young people are disproportionately affected by chlamydia, gonorrhoea and

genital warts. For example, regarding chlamydia, recent surveillance data from the Health Protection Agency (2007) demonstrate that the figures continue to show the highest increase for both sexes is in the 16-24 age group. In 2006, young women and men accounted for 74% and 56% of all chlamydia diagnoses and 70% and 39% of gonorrhoea diagnoses, respectively. Evidence shows that sexual risk behaviours have increased, for example an increasingly younger age at first intercourse, increases in the number of partners and non-use of contraception or condoms with new or casual partners (Wellings, Nanchahal, Macdowall and McManus, 2001).

Government targets include those to reduce the teenage pregnancy rate and prevalence of STIs. Unfortunately, young people often report that they find sexual health services difficult to access (Coleman, 2001). Research indicates accessibility, confidentiality and fears of being judged are major concerns for young people wishing to use sexual health services (Aggleton, Oliver and Rivers, 1998; British Medical Association, 1993; Jacobsen, Wilkinson and Owen, 1994; Malus, 1986) and thus a confidential, accessible, non-judgemental service is key for young people (Garside, Ayres, Owen and Pearson, 2002). 'Mystery shopper' studies, where young people have been trained to evaluate services, posing as genuine patients, have reported problems in accessing services, particularly in reception. Sykes and O'Sullivan (2006) in a study of clinics in Croydon, found young people were told by reception staff that they were too young to use the service, that they did not need emergency contraception and that they would have to wait two weeks for an appointment.

Designated youth-oriented clinics have shown to be better providers of sexual health services as measured by lowered conception rates and increased contraceptive uptake (Allaby, 1993; 1995) and services based in youth clubs have been found to be popular with both young men and women (Hayter, 2005). Services which are mainstream (i.e., not specific to young people) but have extended opening hours and are walk-in, so that no appointment is necessary, combined with sexual health outreach workers to facilitate access, have been shown to be popular with young people (Baraitser, Fettiplace, Dolan, Massil and Cowley, 2002). Sexual health outreach work has been shown to increase knowledge in both workers and users of local sexual health services (Baraitser, Dolan, Feldman, and Cowley, 2002).

General practice should be among the most accessible and available health providers for teenagers. They are also the most cost-effective way of delivering

contraceptive services (Hughes and McGuire, 1996). However there are barriers to young people accessing general practice. Burack (2000) carried out a large survey of teenagers aged 13 to 15 years in two London borough's. Over one thousand teenagers completed the survey. Whilst the majority (709 [68%]) were aware of the sexual health services offered by GPs and 786 (75%) were positive about being given helpful advice, 567 (54%) of teenagers believed they had to over 16 years old to access sexual health services and 604 (58%) were concerned about their confidentiality not being preserved by their GP.

Teenagers fear of lack of confidentiality, particularly from GPs has been reported previously (Wareham and Drummond, 1994). This indicates a lack of knowledge by teenagers of their rights and perhaps a lack of effort from GPs and primary care services to publicise them effectively. Another possibility is that GPs are unaware of their young patients' rights or perhaps are refusing to see them without their parents present (Burack, 2000). Markham, Bullock, Matthews, Firmstone et al. (2005), identified that whilst the majority of GPs are prepared to offer sexual health services, such as contraceptive services and STI testing, training in these areas is needed.

Davies (2003) carried out a questionnaire study of 17 General Practices in Cornwall. Questionnaires were given to GPs, practice nurses and reception staff. The majority of GP's (94%) and practice nurses (85%) were willing to consult with an unaccompanied under 16. However when asked if they knew of any practice policy on under 16s access, only 41% of receptionists, 46% of practice nurses and 38% of GPs were aware of a definite policy.

In the 1990s, government guidance highlighted the need for primary care to be more 'user friendly' and for sexual health provision for teenagers to remain a priority (Department of Health, 1992; 1998). In 2001, the Department of Health (DH) published the first "Strategy for Sexual Health" which reiterated the importance of user friendly, accessible sexual health services for young people. It has continued to remain on the agenda, for example, the Royal College of Physicians led the initiative "Getting it Right for Teenagers in Your Practice" (2002). More recently, the DH developed "You're Welcome (2005) quality criteria" to support the implementation of Standard 4 of the National Service Framework (NSF) for Children, Young People, and Maternity Services. NSFs are long term strategies for improving specific areas of care. They set national standards, identify key interventions and put in place agreed time scales for implementation. Standard 4 of the children's NSF is 'Growing Up into

Adulthood'. This standard outlines that all young people should have access to age-appropriate services which are responsive to their specific needs as they grow into adulthood. As part of this, services should implement policies and good practice guidelines on consent and confidentiality for young people and young people should be actively involved in planning and implementing health promotion services and initiatives. Research shows that good communication, a good relationship with a doctor or nurse, and non judgmental attitudes in all staff can help encourage young people to use services (Free, Lee and Ogden, 2002). Research has also shown that appropriate information materials, written with the target audience in mind, using appropriate language and using humour are appreciated by young people (Kane, Macdowall and Wellings, 2003).

The You're Welcome criteria, reissued in April 2007, lay out principles to help health services to be young people friendly. Adhering to these criteria has the potential to contribute to achievement of targets (such as the under-18 conception target) as well as providing good services. The criteria were developed based on examples of effective local practice with young people aged under 20.

You're Welcome covers ten topic areas:

1. Accessibility
2. Publicity
3. Confidentiality and consent
4. The environment
5. Staff training, skills, attitudes and values
6. Monitoring and evaluation, and involving young people
7. Joined-up working
8. Health issues for adolescents
9. Sexual health and reproductive health services
10. Child and adolescent mental health services (CAMHS)

For example, the criteria 'Confidentiality and consent' states "Confidentiality and consent policies are made explicit to young people and parents or carers through information on display in the reception area". The "You're Welcome" guidance forms the backbone of the consultancy project. The guidance is accessible online via the DH website and can be seen in the practice log (see entry, November 2005).

### 3.1c Assessment of the feasibility of the consultancy

The consultancy project was undertaken as part of my role as Young People's Sexual Health Development Worker. There was no additional payment for this work. The majority of human resources required by the project would be fulfilled by myself with the assistance of the intermediate clients (i.e., key personnel forming the "You're Welcome" working party detailed below).

Possible constraints to the consultancy involved financial limitations. At the time the consultancy was proposed, the NHS became under increasing pressure to restrict spending. At WPCT this meant a recruitment freeze and restricted spending on any new initiatives. In addition, at the time the consultancy was planned, WPCT had a contract with the sexual health charitable organisation, Brook, to provide two full-time workers to deliver sex and relationship education. During the period of the consultancy this contract was terminated. This impacted on my plans for the consultancy. I had hoped to utilise the two workers to assist me in involving young people in the project. Also, I was increasingly asked to do outreach work with young people and training for front-line workers which they had previously undertaken as part of their contract and this impacted on my capacity.

### Reflection

I felt anxious when initially discussing this piece of work and daunted at the prospect of undertaking the project. To begin with I was unclear as to what was expected of me and unfamiliar with the professionals who needed to be involved. I had not previously been the lead for a project of this magnitude. However, I was looking forward to carrying out this work because I felt the project was very worthwhile as hopefully young people's experiences of accessing services would be enhanced by implementation of this consultancy. In order to gain expertise in this area and to ensure my work was evidence based, I undertook a literature search of electronic databases and relevant policy documentation.

Fortunately I quickly developed a good relationship with the primary client and this helped me relax and to adapt to the role of consultant and lead for the project. I also drew confidence from my previous job where I had been responsible for training health professionals and had run sessions in a GP practice.

A learning point at this initial stage was my lack of experience when trying to plan the costing for the project. I identified this as a development need and raised this in my appraisal with my manager.

### **3.2 Planning the Consultancy**

Through initial meetings with the contact client, the aims and objectives of the consultancy and time-scale were established.

AIM: To develop and implement a young people friendly accreditation system for providers of sexual health services (GP practices, sexual health clinics and contraception services) in line with the aims and philosophy outlined in: "You're Welcome Quality Criteria: Making Health Services Young People Friendly" (Department of Health, 2005).

#### **OBJECTIVES/MAIN TASKS OF THE CONSULTANCY:**

- Establish and co-ordinate a multi-agency working party comprising relevant professionals to oversee the project
- Develop methods of user involvement by engaging young people in the project and providing a link between young people and the professional working party
- Develop a set of young people friendly criteria, based on 'You're Welcome' (Department of Health, 2005), which services will need to attain in order to be accredited with young people friendly status appropriate to the needs of young people
- Collate relevant materials to assist services wishing to undertake accreditation
- Initiate and oversee the pilot stage of the project by supporting primary care sites and young people's sexual health clinics in Westminster (a minimum of 3 sites to be involved in the pilot)
- Provide ongoing support for services to develop to meet the young people friendly criteria, for example, delivering training and developing health promotion materials
- Develop a mechanism for evaluating the impact of the project

#### OUTCOME CRITERIA:

- Maintain effective working relationships with professionals in the working party (for example, good attendance at meetings)
- Engagement with young people
- Development of the young people friendly criteria and documentation which services would complete as part of the scheme
- Engagement and implementation of the pilot sites
- Evaluation

#### KEY PERSONNEL:

One of the first steps of the consultancy was to outline the key personnel to be involved in the working party. These were:

Service Development Manager

School Nurse (North of Borough)

School Nurse (South of Borough)

GP (Medical Centre)

Healthy Schools Co-ordinator

Nurse lead for young people's GUM service (Hospital)

Nurse lead for young people's GUM service (Community)

Teenage Pregnancy Coordinator (City Council)

Nurse (Contraceptive Services)

Condom Scheme Manager

Sexual Health lead for Health Promotion, Health Improvement Team

Youth Service (City Council)

Reception Manager (Health Centre)

Practice Manager (Health Centre)

Prior to the first working party meeting I developed a draft Terms of Reference (see practice log, January 2006) which outlined the aim and role of the group, accountability, membership and working practices. The Terms of Reference were agreed at the first meeting. One role of the working party was to provide the mechanism for monitoring the consultancy. It also helped clarify the roles of individuals and lines of accountability, by making explicit that the group was accountable to the local Young People's Strategic Partnership Group.



I developed a consultancy plan/timetable, in discussions with the primary client. We decided together that due to the innovative nature of the project it was difficult to quantify the project in terms of specific timescales and thus agreed not to have a detailed time frame but to revisit the plan regularly. The timetable (and subsequent revisions) can be seen in appendix C1.

## THEORETICAL FRAMEWORK UNDERPINNING CONSULTANCY

I chose to adopt the model of process consultation described by Schein (1999). Schein outlines three different models of consultancy: 1) The Expert Model (client purchases from the consultant something she is not able to provide herself), 2) The Doctor-Patient Model (consultant diagnoses the problem and is expected to provide the solution) and 3) Process consultation (PC). Schein defines PC as “the creation of a relationship with the client that permits the client to perceive, understand, and act on the process events that occur in the client’s internal and external environment in order to improve the situations as defined by the client” (p.20).

In the preliminary meetings I adopted the PC approach. Both I and the primary client worked together in planning the project in order to “share the problem”. Whilst all the models have their merit, being in PC mode is particularly important at the beginning of the project because it is the mode most likely to reveal what the client really wants and what behaviour will be helpful. The PC mode “is necessary at the beginning of any helping process because it is the only mode that will reveal what is really going on and what kind of help is needed” (p.10). As Schein explains, it is important to work closely with the primary client because they are familiar with the culture and politics of the organisation. Although I worked in the same organisation as the client, I was new to the organisation when the consultancy began and thus unfamiliar with the organisational culture.

However as Schein describes, the consultant will not use one of the models all the time but will choose the one most appropriate to each situation. Therefore sometimes I used aspects of the expert or doctor role.

## SCOPE OF THE CONSULTANCY

If successful, there is the potential for involving many services in this consultancy project, for instance there are 53 GP practices, 2 GUM clinics and 7 contraception clinics in Westminster. There would also be the potential to roll out the project to community pharmacists, some of whom offer sexual health

services, such as Chlamydia screening, emergency contraception and sell condoms. However due to the fact that this is a new project and both financial and human resources are limited, it was agreed to pilot the project initially with 3 sites: two young people's sexual health clinics and one GP practice. Piloting the project would give an idea of the time involved both for the provider and the co-ordinator at the PCT (i.e., myself) which was unknown. The experiences of the pilots would be used to consider the best way to roll out the second stage of the project.

### Reflection

The model of process consultation with its focus of involving the client to learn about the politics and culture of the organisation suited my position because at the time I started the consultation I was new to the organisation and not yet familiar with the culture.

Also when I reflected on the planning of the consultancy I realised I was fortunate that I did not have to specify detailed time frames (for example, the exact number of days I would need to work on the project) as it was very difficult at the beginning of the project for either myself or the client to plan the project using detailed time scales. I found the planning nature of the project quite difficult as I had not been involved in project work of this kind previously and due to the innovative nature of the project (i.e., it had only been implemented in a few PCTs nationally) it was difficult to locate guidance of this nature.

Schein discusses the "psychological contract" (p. 235) which is the tacit set of expectations on the part of the consultant and client about what each will give and receive in the relationship. He writes, "It makes sense to be open about expectations at each stage but that openness includes saying that I am not sure where we are going, how things might evolve, and/or what kinds of issues may lie ahead" (p236). This was particularly true at the start of the project as there was some uncertainty of how smoothly the project would develop and the barriers we may face.

## **3.3. Establish, Develop and Maintain Working Relationships With Clients**

### **3.3a Establish contact with clients**

I was based in the same building as the primary client which facilitated our contact. This meant arranging locations that were accessible for the client was straightforward. Initially the client and I brainstormed a list of professionals who we believed were important in the involvement of the project. We both felt it was

important for the project to have members of primary care involved, particularly a GP and receptionist. In order to develop working relationships with each member of the working party, I met each individually before the first meeting. This was to build a relationship and also help create a warm atmosphere between us so they would feel able to express their opinions and any concerns they may have in the working party meetings.

### 3.3b Develop and maintain consultancy contracts with clients

The terms of reference I had written for the working party helped establish and maintain relationships with the primary and intermediate clients because this detailed the purpose of the meetings, the boundaries of the group and practical issues, such as the frequency of the meetings. At the first meeting, dates were agreed for the following four meetings so group members had plenty of advance notice to maximise attendance.

#### Consultancy contract

The consultancy was covered as part of my role as a Young People's Sexual Health Development Worker at WPCT. As such it was included under the terms and conditions of my employment and there was no additional payment for this work. The consultancy contract was developed and negotiated over a period of time with the client after several discussions, when we both had a greater understanding of what would be involved in carrying out the project. This is line with the experiences of Schein in carrying out process consultation. He states,

“Many descriptions of the consultation process emphasize the need for a clearly articulated contract from the outset. The reality for me has been that the nature of the contract and who the client is with whom I should be doing the contracting shift constantly, so that contracting is virtually a perpetual process rather than something one does up front prior to beginning the consultation” (p29).

The consultancy contract can be seen in appendix C2 (signed copies are in the November 2005 and October 2007 entries of the practice log). It was agreed that we would review the contract approximately six months after its formulation (July, 2006).

A budget had not been put aside to implement this project however the working group could make recommendations to several other groups which held a budget, such as the sexual health and teenage pregnancy strategy groups. During the project, I agreed an initial sum with the Teenage Pregnancy Co-ordinator for £1,500.

### 3.3c Develop and maintain working relationships with clients and 3.3d Monitor and evaluate working relationships with clients

The primary client and I discussed the process which would suit us best in terms of developing, maintaining and monitoring our working relationship. We agreed that it would be best to meet at regular intervals between the working party meetings. The purpose of these meetings was to: 1) update the client on work I had been undertaking on the project; 2) brainstorm ideas for any difficulties which had arisen; 3) plan for future working party meetings and the next stage of the project and 4) conduct a review of progress and monitor our working relationship. We also agreed to meet before each working party meeting in order to catch up with one another and discuss any issues arising. We also agreed to communicate via email as and when necessary between meetings in order to keep each other regularly updated and ensure good lines of communication.

### Reflection (on the process of developing the consultancy contract, how the contract developed, negotiations and reviews carried out and a final evaluation of the contract)

On reflection it was beneficial to meet the intermediate clients (i.e., members of the working party) on an individual basis before the first working party meeting in order to engage them in helping me take the project forward. Although it was a time consuming process, in hindsight this was a very useful undertaking because it helped me engage with individual members and begin to build a relationship with each of them.

Schein (1999) highlights the importance of *interpersonal* processes in group dynamics. He describes four problems people face when entering a new group: 1) identity; 2) control and influence; 3) needs and goals and 4) acceptance and intimacy. He explains that in coping with these problems individuals will use tough-aggressive, tender-affiliative or withdrawal responses. I can certainly relate to the behaviours Schein describes from membership of previous steering groups. My experience on this occasion however was that this group worked harmoniously and was not dominated by any particular individual or group of individuals and all members contributed to discussion. The group worked well because the chair was effective at inviting contributions from all members. All members of the group were supportive of the project and worked with young people in some capacity and were fully behind the aims and objectives of the work.

As with the formulation of the project timetable, I found it difficult initially to outline in detail the consultancy contract although this became clearer when I gained more knowledge of the project. At several stages, it was necessary to re-negotiate the consultancy timetable, due to problems regarding the planned involvement of young people and due to an invitation to take place in a DH pilot (described under the section '3.5' below). The relationship I had with the client was positive in a number of aspects such as being open and frequently communicating, which contributed to the ease of developing, negotiating and reviewing the contract.

### **3.4 Conduct Consultancy**

#### **3.4a Establish systems or processes to deliver the planned activities**

The working party first met on 18<sup>th</sup> January, 2006. This was a key stage in setting up the consultancy. The working party met on four occasions before the launch of the Westminster pilot. During this time it was necessary for me to gain agreement from three pilot sites to take part.

During the period October 2005 to April 2008 I implemented the following activities in line with the objectives of the consultancy plan:

- 1) I established and co-ordinated a multi-agency working party comprising relevant professionals to oversee the project. We met on a total of seven occasions.
- 2) During the period January 2006 to April 2006 I developed a set of young people friendly criteria, based on 'You're Welcome' (Department of Health, 2005). These were refined in line with feedback from services participating in the pilot.
- 3) I developed the pathway for the "accreditation process", i.e., the process a service would need to go through to receive accreditation of being "young people friendly."
- 4) I supported the pilot sites to complete the self-assessment, through face-to-face meetings, telephone and email contact. This included the production of a "pilot pack" which included supporting materials for each pilot site. The pack included: 1) The "You're Welcome" guidance, 2) The Young People Friendly Criteria toolkit, 3) The Quality Accreditation Process, 4) a catalogue of health promotion literature and resources for young people available via Westminster PCT. These materials can be seen in the July, 2007 entry of the practice log.

The working party meetings and the launch of the pilots on 18<sup>th</sup> July 2006 were key stages in achieving the objectives of the consultancy contract. At the launch I gave a presentation on the progress of the consultancy to date.

#### 3.4b Implementing the planned activities

During the pilot, it became evident that a need for all services was training. One of the criteria specified by “You’re Welcome” was ‘staff training, attitudes and values’. It outlines that “all staff who are likely to come into contact with young people receive basic training on:

- communicating easily with young people;
- promoting attitudes and values that are young people friendly;
- meeting standards established in the current NHS Knowledge and Skills Framework;
- working to current Department of Health guidance on confidentiality and consent and seeing young people on their own.”

In particular, reception staff had limited training in this area. As a result I designed and delivered training to enable services to fulfil this criteria. I delivered three training sessions for reception staff at a GUM clinic in June and July, 2007. I also delivered two training sessions for reception staff at a GP practice.

As described below, the consultancy underwent a change during the period October 2007 – April 2008 when Westminster was invited to take part in a Department of Health national pilot (documented under 3.5 below).

The minutes of the working party meetings provided a mechanism for documenting the outcomes of the consultancy in relation to its objectives. A working party meeting was held in September 2007 which reviewed the experiences of the pilot sites. As part of this process, a discussion was held about the aspects of the consultancy not being met. These were the young people’s involvement and the development of a young people friendly logo.

#### 3.4c Closing the consultancy (please see last paragraph of the case study).

## Reflection

The working party meetings provided an opportunity to discuss any problems with the consultancy. For example, in the original timetable, the plan was to consult with young people during April 2006. I had planned to consult with young people during consultations I had arranged for the development of another piece of work, however this proved to be unrealistic due to time constraints as there was insufficient time during the consultations to gain young people's views about both projects. Further problems occurred in arranging consultations with young people as the venues chosen to seek the views of young people were youth clubs and during the summer months it was not possible to conduct consultations as the clubs have busy schedules during this time.

A strength of the consultancy was the enthusiasm and support of members of the working party and engagement of service providers. The working party meetings were well attended and I developed good working relationships with the services.

## **3.5 Monitoring The Consultancy**

### **3.5a Review consultancy**

As specified in the consultancy contract, it was agreed with the client that the monitoring of the consultancy would be through the working party meetings (initially every six weeks) and meetings between ourselves. At each working party meeting I provided feedback and information on the progress of the consultancy. These meetings gave a valuable opportunity for key personnel to have a say in the development of the consultancy. I took the minutes at these meetings and emailed these to all working party members shortly after the meeting. The minutes provided a useful source of reference for the progress of the consultancy and examples can be seen in appendix C3 (additional meeting minutes can be found in the practice log). The minutes were also useful as a means of planning and documenting any changes to the consultancy.

The client and I also had regular one-to-one meetings (approximately every 3 weeks) and communicated via email to monitor the progress of the consultancy on a regular basis. In July 2006 we arranged a formal review meeting to review client expectations, needs and requirements within the consultancy. This can be seen in appendix C4. The client felt having regular working party meetings had been successful for keeping the project on track. We both felt the involvement of young people in the project had been the most problematic part, as it had met with delays. We had expected that the Youth Service would help with the

involvement of young people in the work, however this assistance did not materialise.

### 3.5b Implement changes identified by the monitoring process

Several factors affected the consultancy plan during the period Autumn 2006 to Autumn 2007 which resulted in changes to the original plans. These included my experiencing a family bereavement which led to my suspending Stage 2 (October, 2006 – December, 2007). Also, in the initial consultancy plan it had been planned to use local young people to develop a logo which would be used to 'badge' services being accredited with achieving You're Welcome (YW) status. However, the PCT was aware of discussions taking place at a national level by DH of the development of a national toolkit and associated publicity materials, including a national logo. It was felt having both a local logo and national logo would be confusing to young people and a waste of resources. It was thus agreed in conjunction with the primary client and working party to abandon the plan to develop local Westminster publicity, including a logo developed by Westminster young people at the working party meeting in September, 2007.

### 3.5c Review client expectations, needs and requirements within the consultancy

I met regularly with the client in order to allow any necessary changes in requirements. During the autumn period of 2007, the consultancy was planned to close following the review of the pilots. However during this period the clients' needs and requirements changed substantially as there was a significant development in the consultancy. Senior colleagues within the PCT and Local Authority were informed that DH was looking for areas in which to pilot the You're Welcome criteria which were re-launched in 2007. Having undertaken much of the ground work as part of this consultancy, Westminster was selected as one of eight Boroughs' in London to take part. The pilot was due to start in October 2007 and end April 2008. It was thus decided to extend the period of consultancy until the end of the DH pilot. Another significant development was the primary client leaving in October 2007 to go on maternity leave. Thus it was necessary to negotiate and agree new role requirements in relation to the revised needs, expectations and requirements. The role of primary client passed to the Teenage Pregnancy Co-ordinator, based in the Local Authority.

At the September 2007 steering group meeting it was agreed by the key personnel present that Westminster should be part of the DH pilot. In their letter



inviting Westminster to participate (see appendix C5), DH specified the following requirements:

- Identification of a local lead who will liaise and work with the regional You're Welcome project manager
- Identification of a number of local services to participate in a 2-3 hour self-assessment exercise, with possible follow up interview. A minimum of 6 settings were required to include the following:
  - 2-4 primary care practices
  - 1 Sexual or reproductive health service
  - 1 Child and Adolescent Mental Health Service (CAMHS)
  - Local abortion providers (both NHS and independent under NHS contract)
  - Health service provided in youth or extended service setting
- Support to identify young people who would welcome the opportunity to train as young assessors.

It was agreed I would be the local lead for the DH pilot. The DH pilot was to be managed in London by Government Office for London (GOL). A project manager for London, was recruited to help local co-ordinators meet the stipulations of the pilot.

### 3.5d To implement quality assurance and control mechanisms

To maintain the confidentiality of data, services' self-assessments were anonymous when returned to the DH. For security, self-assessments were not stored on the shared drive at the PCT but within a password protected folder. It was agreed during the early stages of the scheme that an "Evaluation Panel" needed to be established to act as a quality assurance and control mechanism. This panel, to be made up of members of the working party, would review the evidence a service submitted in order to see if they met the young people friendly criteria. This was reviewed in line of the DH pilot as one outcome of the pilot was to develop a national quality assurance mechanism. The model suggested was a tiered approach. Firstly, services would complete the self-assessment; secondly there would be an informal review by the local co-ordinator; thirdly there would be young people verification which would involve a mystery shopper visit and a local panel, consisting of professionals and young people to decide whether the service should receive You're Welcome

accreditation. Ten percent of the services would be verified by a cross Government Office panel.

The contingency measures identified were to notify the Teenage Pregnancy co-ordinator of any difficulties and Head of Children's Services at the PCT. Another contingency measure was to inform the Regional Co-ordinator at GOL who was able to assist with any difficulties within the local area.

The targets for the project were clearly defined. As local lead I was required to write a mid-term review for the project by 14<sup>th</sup> January, 2008 (to include all 6 settings completed self-assessments) and a final evaluation report by 14<sup>th</sup> April, 2008.

Implementing suitable reporting procedures was considered to be a very important part of the pilot in order for subsequent roll-out of You're Welcome within the PCT and Local Authority. The PCTs existing structures were utilised to ensure the monitoring and evaluation of You're Welcome was considered by relevant parties and to progress the work. For example, I gave a presentation at the Westminster Teenage Pregnancy Strategy Group (see practice log, October, 2007) and wrote a briefing paper for the Be Healthy group<sup>1</sup> (see practice log, January, 2008). These groups provided opportunities for key colleagues to be involved and provide their input into the development of the project.

In order to engage each service, it was necessary for me to gain agreement from each service lead. This was largely unproblematic, although one service was hesitant about participating (this is described in greater detail under section '3.6' below). Whilst the mystery shopping element of young people's involvement did not occur as part of the pilot, the ethics of this initiative was debated at a regional level, for example, we discussed the ethics of a young person visiting a sexual health clinic and having an internal examination. It was felt important to have sound procedures in place for this part of the process and a consideration of the ethical issues involved.

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<sup>1</sup> The Be Healthy Group is the multi agency strategic planning group for improving outcomes for the health and well being of children and young people as set out in the NSF for Children, Young People and Maternity Services, the Be Healthy outcome of Every Child Matters and other relevant guidance for this care group in Westminster. The group acts as the Be Healthy sub group of the Children and Young People's Strategic Partnership and is chaired by the Director of Service Development, who is also the Health representative on the Children and Young People of Strategic Partnership (CYPSP).

## Reflection

This was my first experience of working on a national pilot and I was excited and daunted at the prospect. As a result of the primary client's departure, I was left responsible for the project and somewhat isolated in terms of support. On reflection, I felt 'swamped' at points with my workload in my job and other requirements of Stage 2, such as my research project. However my confidence really grew during this stage of the project as I realised I was capable leading the project independently. As part of the pilot, we were awarded £11,500 of funding, which I was not expecting and was a welcome development.

During the first stages of the Westminster pilot I spent considerable time developing a Westminster toolkit and operating framework. When the DH toolkit was produced, as national standards, it made sense to replace the Westminster standards with the national toolkit. Thus, to some extent it felt the work I had done previously was somewhat a waste of time. However, we were only selected as a DH pilot due to our work on the project to date and so for this reason it was worthwhile.

## **3.6 Evaluate The Impact Of The Consultancy**

### 3.6a Identify evaluation needs and design evaluation

Westminster's selection as a DH pilot site is in itself is an important marker for evaluating the impact of the consultancy as Westminster was only successful in becoming one of the eight London pilot sites due to the work already undertaken for this consultancy.

A meeting was held between myself and the client prior to the commencement of the DH pilot where we agreed that several methods would be utilised to evaluate the impact of the consultancy. The evaluation methods chosen are similar to those suggested by Earll and Bath (2004). These were:

- 1) Engagement and participation of 6 services in Westminster as specified by the requirements of the DH pilot in line with the January 14<sup>th</sup> 2008 deadline
- 2) Young people's feedback on their experience of using services
- 3) Dissemination of the consultancy
- 4) Feedback from staff who had received training

### 3.6b Implement planned evaluation

Each evaluation criteria will be considered in turn:

- 1) Participation of services and submission of self-assessments

The evaluation methodology for the self-assessment toolkit and feedback form for services to complete were provided by DH as they were standardised (see January 2008 practice log for the self-assessment toolkit). I was successful in gaining the participation of 7 Westminster services (we had been asked for 6 services to participate). The 7 services who participated included the three services who had initially participated in the Westminster pilot. One of the requirements of the DH pilot was to engage with an abortion provider. I approached our provider who deals with assessments and referrals for NHS terminations. I spoke to the Director of the service, who initially was reluctant to take part and rather cynical of the process. I was expecting this reaction due to previous discussions where she had spoken to me about how she did not want to attract large numbers of young people, particularly young men into the service. In section 3.1 above, I previously identified this person as an “involved non-client” (Schein, 1999). I spoke to the Director at length about the process and re-assured her that the self-assessments returned to DH were anonymous as I believed she was concerned her service would score poorly against the criteria. We agreed that I would email her the self-assessment, which she then completed.

All the services completed their self-assessments within the time period. I wrote an evaluation report for the mid-term review of the pilot which includes the summary page from each service’s self-assessment and their feedback on the process. This data is anonymous. The report can be seen in the practice log (January, 2008).

## 2) Young people’s feedback on their experience of using the services

One of the requirements of the DH pilot was for young people to assess for themselves one or two of the services who had completed the criteria. It was expected by DH that the Youth Participation Lead at the Local Authority would lead on this part of the pilot, by recruiting the young people and supporting them to complete their assessments. It was an expectation of the DH that the Youth Service would have a pool of young people available to undertake this work. Unfortunately the Youth Service informed me that they did not have young people available to undertake this work. As a result we designed a flyer and distributed it to a number of youth organisations (see practice log, February 2008). In addition, I took the flyer into schools and explained the project to Year 12 students. As a result, two young men (aged 17) expressed an interest in participating, however unfortunately we were unable to recruit sufficient young

people within the timescales for the pilot. A decision was taken in conjunction with the young people's participation lead at DH that Westminster would not be part of the pilot for the young people's participation element, but that it was likely that You're Welcome would be rolled out in 2008/9 so there would be further opportunities for this to take place.

### 3) Dissemination of the consultancy

Westminster's involvement was successfully disseminated both internally and externally. I presented at the North West London Children Leads meeting in December, 2007 which raised awareness of the project and the Be Healthy group in January, 2008. I also gave updates of the work to the Teenage Pregnancy and Sexual Health Strategy groups.

Regarding external dissemination, I led a workshop at the launch of You're Welcome on 24th April, 2008 which included colleagues from a number of different services and organisations across London. The programme can be seen in appendix C6.

### 4) Feedback from staff who had received training

As part of this project, I delivered a total of 5 ½ day training sessions to receptionists. An example of participant feedback can be seen in appendix C7 (more feedback can be seen in the January 2008 entry of the practice log). Participants reported feeling more confident in working with young people, including dealing with difficult situations, knowing about the law regarding sex and young people and confidentiality and consent. Participants commented that they enjoyed the style of the training (which involved group exercises) and the discussion and interaction the training encouraged.

### 3.6c Assess the outcomes of the evaluation

I wrote the evaluation report in line with the 14<sup>th</sup> April, 2008 deadline (see appendix C8). This report presents a synopsis of the results of the self-assessments of the Westminster pilots. It discusses the experience of Westminster as a pilot site. The report contains the conclusions of the evaluation, drawing together the perspective of myself as local coordinator and service's feedback on the process. This report was used by the London regional co-ordinator, alongside the other reports submitted by London Borough's to provide an overall evaluation of You're Welcome in London (see practice log, April 2008).

The conclusions and organisational implications of the evaluation have been discussed with a number of relevant others. The evaluation revealed a number of key areas which were particular weaknesses in service providers. These were staff training, publicity and the inclusion of young people in monitoring and evaluation. Subsequently discussions have taken place with a number of relevant parties, including the Teenage Pregnancy Coordinator, Sexual Health Commissioner and Involving People team. The implications were also discussed with a wider audience at the London launch on 24<sup>th</sup> April, 2008.

The information from the evaluation has been used to formulate an action plan for the sustainability of You're Welcome in Westminster which draws together the priorities for the next stage of the project. This can be seen at the end of the evaluation report. The next step is to implement these actions.

### Reflection

I feel engagement of 7 service providers was the real strength of the project and the workshop launch on 24<sup>th</sup> April where three services attended and contributed to the workshop I delivered, demonstrated this. In addition, I did well to engage with two GP practices in the pilot. Other Borough's in the pilot struggled to engage with general practice. Four of the eight pilot Boroughs were not able to return any self-assessments for GPs. I believe this was a credit to myself for it was only possible to complete the requirements of the pilot through engagement with services.

### 3.4c Closing the consultancy

The closing of the consultancy was marked by the launch of You're Welcome on 24<sup>th</sup> April, 2008. I led on a workshop describing the self-assessment toolkit where I was supported by three services (2 sexual health services and 1 CAMHS). Communication between myself, service providers, working party members and PCT/LA colleagues took place regularly throughout the period, predominantly through email and face-to-face contact.

The results and recommendations of the consultancy were reported through the final report to DH. This was cascaded to all working party members and relevant individuals in the PCT and LA. An action plan had been developed as a result of Westminster's engagement in the pilot for the roll out of You're Welcome.

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### **Core Competence 4: Training Competence**

Teaching and Training Case Study 1: Teaching MSc Health Psychology Students



## **Introduction**

This case study describes two lectures in smoking cessation for MSc Health Psychology students at University College London (UCL) and City University. This involved a two hour lecture at UCL in November, 2004 and a one hour lecture at City University in March, 2005. I utilised the feedback from UCL students and modified the lecture to try and improve it. I have submitted a video recording and observers report from the City lecture as evidence for this competency.

## **4.1 Plan and design training programmes that enable students to learn about psychological knowledge, skills and practices**

### **4.1a, 4.1b and 4.1c**

To assess training needs, I met the Course Director at UCL and City University to discuss the current course programme and levels of learners' knowledge. I also obtained literature on the MSc course Aims and Learning Objectives and the lecture timetable for the term (see appendix C9). UCL did not currently have a smoking cessation lecture and the Course Director felt this would be a valuable addition.

To gain greater understanding of students' levels of knowledge and assess their needs, I consulted with them through a questionnaire enquiring whether they had prior knowledge and/or experience of smoking cessation and their desired learning outcomes (responses from this needs assessment can be seen in appendix C10).

I planned the lecture drawing on my existing knowledge and experience of working in smoking cessation. I also undertook a literature search of health psychology research in this area. I practised delivering the training with trainee health psychology colleagues at my workplace to check the lecture content was clear and fitted the time available. I submitted the aims, learning objectives, teaching plan and a copy of the lecture slides to the Course Directors for comment and feedback before finalising the content.

I chose to use a mixture of didactic and experiential methods of teaching. The lecture involved a PowerPoint presentation (see practice log entries November, 2004 and March, 2005), providing students with knowledge of research and practice in smoking cessation. In order to encourage involvement during this time, I planned it to be participatory by interspersing the presentation through asking students questions. The lecture was also planned to include experiential learning, including a case study, role-play and quiz (these can be found in the

practice log, March 2005). The purpose of using a variety of training methods was to maximise learning. Theories of learning, such as Piaget (1950), indicate that “learners have to be brought to ‘engage’ with what they are learning so that transformation and internalisation can occur” (Fry, Ketteridge and Marshall, 1999;37). Also using a variety of strategies to promote learning would help accommodate differences in learning styles (Honey and Mumford, 1982).

#### 4.1d and 4.1e

I produced the following training materials: lecture slides, reading list, case study, smoking cessation quiz and feedback questionnaire. Students were also given a handout of Fagerstrom’s test for Nicotine Dependence (Heatherton, Kozlowski, Frecker, and Fagerstrom, 1991) and the NHS publication ‘Giving Up For Life: Don’t Stop Smoking Group Giving Up’ (training materials can be seen in the practice log, March, 2005). I used various visual materials to facilitate learning such as the Nicotine Replacement Therapy products and a carbon monoxide monitor. This was done to try to counteract the passivity of the audience invited by a lecture situation in order to promote lasting learning (Winefield, 2003). These materials were also selected as appropriate aids to facilitate access and retention of information. I chose Microsoft PowerPoint to deliver the lecture because it is a good system for delivering information to large groups (Farrow, 2003). UCL students were given a copy of the lecture slides at the end of the lecture. City students were able to download the slides from the University’s intranet.

#### Reflection

To meet the requirements of this unit, I read around this area, as I was previously unfamiliar with concepts such as ‘models of learning’. The knowledge I have acquired will help me design training in the future.

For the City lecture, to enquire about the levels of knowledge of learners and their training needs, I emailed students a questionnaire to complete prior to the lecture. Unfortunately I only received five responses. On reflection I think it may have been more successful to use a different method of data collection such as a focus group, which could have involved a greater number of students and allowed a more in-depth discussion of their needs.

I was pleased with the different training methods I had chosen. From my observation, students seemed to enjoy the interactive parts of the lecture, such as the carbon monoxide monitor demonstration, case study and role play. This

was reflected in their feedback. For example, in response to the question, 'What did you find most useful about the lecture?' one student wrote, 'The practical aspects of the presentation made the presentation more realistic and demonstrative'.

## **4.2 Deliver training programmes encompassing psychological, knowledge, skills and practices**

### **4.2a Implementation of training methods**

I confirmed electronic facilities would be available at the time and location of the lecture (please see correspondence in November 2004 and March 2005 practice log).

I adapted the training materials and methods from the UCL lecture to the City lecture due to differences in lecture length and UCL students' feedback. Modifications included:

- incorporation of a case study into the City lecture due to suggestions by UCL students;
- removal of the role-play and the section of the presentation about pregnancy and smoking due to having a shorter time period for the City lecture.

I had developed the skills and knowledge to respond to learners because of my experience working as a Stop Smoking Advisor for 11 months prior to lecture delivery. To ensure I had acquired the skills to present training sessions that will maximise learners' development, I attended a two day 'Train the Trainer' course organised by my employer.

### **4.2b Facilitation of Learning**

Teaching was delivered in accordance with the teaching plan. Students were encouraged at the beginning of the lecture to ask questions at any point, so I could respond to any queries during teaching. In order to support students through the learning programme, I provided them with a reading list and my contact details should they wish to contact me after teaching. I asked students questions and gave them a quiz during the lecture to check their understanding and provide encouragement and feedback to learners during training.

### **Reflection**

The experience gained in my job, which requires training different groups of health professionals to deliver smoking cessation interventions helped me

develop my confidence so I felt fairly calm and confident that I had the skills and ability to deliver these lectures.

The 'Train the Trainer' course I attended gave practical tips of how to keep the attention of your audience for example, asking learners' questions. I found this useful and incorporated this technique into the lecture.

In the evaluation feedback, several students commented that they liked my presentation style, finding me approachable and that the presentation was easy to understand.

I found watching the video of myself a valuable experience as a technique for identifying strengths and weaknesses (please see 500 word reflective commentary, appendix C14).

#### **4.3 Plan and implement assessment procedures for training programmes encompassing psychological, knowledge, skills and practices**

Formal methods of assessment at UCL and City had been established prior to my arrangement of the lecture.

##### **UCL Assessment**

Assessment comprised an essay question administered under exam conditions which students take at the end of their second term. Students answer two essay questions from a choice of five. One of the five questions is on smoking cessation, so students have a choice of whether or not to answer a question on this topic. I submitted several possible exam questions to the Course Director who selected the following question: "The Department of Health white paper 'Smoking Kills' (1998) set a target of reducing the number of people smoking by 1.5 million by 2010. What can health psychology contribute?" (see appendix C11).

##### **City Assessment**

Assessment comprises a 3,000 word essay entitled: 'A critical evaluation of health promotion interventions concerned with...' one of the following 5 topics: food, eating and prevention of obesity; alcohol, drinking and prevention of alcoholism; tobacco smoking: prevention and cessation; sexual health, and activity and exercise (see appendix C9).

In accordance with protocol for the MSc Health Psychology at UCL and City University, the Course Directors assessed students work. I established with both Course Directors that students were aware of the assessment criteria and confirmed that security, invigilation and procedures for marking and unexpected

problems were in place according to University regulations. On successful completion of the course, students are awarded an MSc Health Psychology, accredited by the BPS.

I obtained feedback from the Course Director at City University on the results of the assessment. More students answered the smoking cessation question than any other. The Course Director commented that it would be a fair interpretation to conclude that this implies generally students found smoking cessation an interesting topic. This reflects well on my lecture as smoking cessation was not discussed elsewhere on the course (see March, 2005 practice log).

Students also completed a quiz at the end of the lecture (see March, 2005 practice log). I utilised this technique because it is recommended to provide students with encouragement and feedback on their understanding of the topic being discussed (Horgan, 1999; Cantillion, 2003).

Data from the quiz indicates the majority of students had an understanding of the concepts discussed in the lecture. I received 22 answer sheets from the City students. Students were able to attain a maximum score of ten. The number of correct answers ranged from 4-10, with a mean of 7.7 and a mode of 8. 81% of the students were able to name two or more concepts in psychology that can be utilised in helping people stop smoking.

### Reflection

I decided to incorporate the quiz into the lecture as a 'fun' method for providing students with a method of consolidating their learning. I did not receive many comments from the students on how they felt about the quiz, however one student commented in their feedback questionnaire that the "quiz - reinforced what we were told in lecture". I thought using a quiz was a quick and light-hearted method for checking understanding and I would use it again in future training. The quiz also provided information for assessing students on the learning objectives. On reflection, I could have used the quiz as a means of assessing the learning objectives in a more comprehensive way, for example, having a couple of questions based on each learning objective.

## **4.4 Evaluate training programmes encompassing psychological, knowledge, skills and practices**

### **4.4a Evaluate training programme outcomes**

Three sources of feedback were sought to evaluate the teaching: learners, observer and self-reflection. Students were asked to complete a feedback



questionnaire at the end of the lecture. The results of the feedback questionnaires can be seen in the small-scale evaluation report (see appendix C13). One of the questions asked students to what extent they thought their understanding of smoking cessation had improved. Of the UCL students, 45.5% answered 'a lot', 45.5% answered the adjoining option at the positive end of the scale, with 9% (one person) responding in the middle option of the scale. Of the City students, 20% rated 'very much', 44% rated 'quite a lot', 12% 'just about' and 24% 'a little more'.

City students were also asked to complete a feedback form at the end of term for the module. The feedback for the module evaluation as a whole was excellent. Unfortunately there were no qualitative comments on my specific lecture available. For the City lecture, I also obtained feedback from Professor Marks who observed the lecture (see observers report, appendix C15).

I reviewed the results of training programme assessments with the assistance of the Course Director from City University who provided me with information about the results of the essay question. The range of marks received for the smoking cessation essay was large, from 20% to 80%. The majority of marks were at the high end of the scale, but not significantly higher than the marks for other essay topics.

#### 4.4b Identify the factors contributing to training programme outcomes

In order to identify the factors contributing to training programme outcomes, I analysed the responses from the feedback questionnaire, discussed my performance with my supervisor who had observed the lecture and reflected on my performance in a written report. The outcome of this can be seen in the small scale evaluation, which includes the reflective report (see appendix C13).

Feedback from the UCL lecture was used to inform the design of the lecture for City University, for example, I decided to utilise a case study in the City lecture as a result of feedback from UCL students. The case study gave students an opportunity to interact with the new material to encourage active learning and provided an opportunity to "give concrete examples to illustrate abstract principles" discussed in the lecture (Cantillon, 2003;437).

#### 4.4c Identify improvements for the design and delivery of training for implementation in future programmes

A possibility to improve the training for future lectures would be to show students a short video of a consultation. This was suggested by UCL students and would

provide another media to facilitate learning. This would also address the comments by four of the City students who said they would have liked more information about smoking cessation interventions. Since delivering this training I became aware of a video entitled 'Where there's a will, there's a way' by Willi Patterson. This video demonstrates tailoring motivational interviewing techniques to clients Stage of Change (Prochaska, DiClemente, and Norcross, 1992) in smoking cessation using various case studies.

In order to develop new skills and knowledge and undertake training to improve training delivery, I have attended the City University 3 day workshop on planning and delivering training.

### Reflection

I found using a feedback questionnaire a quick and simple method of gathering information on students' experience of the lecture. I was glad I had used both open ended and closed questions because I feel the quantitative data provides a broad overview of what the students thought about the lecture, whilst the qualitative data permits more in-depth understanding.

On reflection, for future training I would have had a specific question on the feedback questionnaire for each one of the learning objectives. For example, although I asked students whether they felt the lecture had increased their understanding of smoking cessation, I could have broken this down into each learning objective, for example, asking students how much their understanding of NHS smoking cessation services had increased.

### Conclusion

Overall, I was pleased with the lectures. Both Course Director's from UCL and City University asked me if I would repeat the lecture in future years which indicates it was well received. I also received positive feedback on the observers report.

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### **Core Competence 4: Training Competence**

Teaching and Training Case Study 2: Workshop on Reflective Practice and  
Personal Values in Sexual Health for Community Nurses



## **Workshop on Reflective Practice and Personal Values in Sexual Health for Community Nurses**

### **Introduction**

This case study describes a workshop I led for community nurses undertaking a programme of continuing professional development (CPD) in Personal, Social and Health Education (PSHE). PSHE helps to give children and young people the knowledge, skills and understanding they need to lead confident, healthy and independent lives. It comprises areas such as emotional health and wellbeing, sex and relationships, alcohol and other drugs, healthy eating, physical activity and safety (Department of Health (DH), 2006).

The CPD programme is based on existing national guidance including the National Healthy School Status: A guide for schools (DH, 2005) and Every Child Matters: Change for Children (Department of Education and Skills (DfES), 2004).

### **4.1 Plan and design training programmes that enable students to learn about psychological knowledge, skills and practices**

I was approached by my manager to deliver a workshop for community nurses undergoing the PSHE certificate programme. To assess training needs, I met with my manager who outlined that she would like a workshop on reflection as an important part of the PSHE certificate is an ability to reflect on practice. My manager explained that the nurses need to be able to document their reflection in a portfolio which is then submitted to the DfES for assessment.

To identify the content of the training programme, I read relevant documentation, including the “DfES PSHE certification for community nurses: Handbook” (DH, 2006). This outlines the requirements for nurses. I learnt that trainees need to write a 750 word personal values statement and reflect on their teaching delivery. From this preparation, I was able to select appropriate training methods and produce a draft ‘Aims and Objectives’ for the session. The length of the workshop was two hours. I felt that this was sufficient time to use a variety of training methods. I planned to combine a traditional style of presentation which would enable me to deliver a short session on the theory of reflective practice with two interactive exercises. One exercise called the “values exercise” was designed to increase trainees awareness of their personal values in sexual health and to enable them to become aware of the values of others. The second exercise involved working alone and then in pairs to give participants an opportunity to practice reflective writing. The values exercise involves

participants reading aloud a value card (for example, 'prostitution', 'male circumcision') and placing it in one of three columns; 'value for myself', 'value for others' and 'do not value'. Participants are required to explain why they have placed it in the particular column selected (for more details about this exercise see practice log, September 2006). The exercise is challenging as it involves discussing personal values of sensitive topics. This type of exercise could be described as 'learning by doing' and is described as highly suitable for adult learners (Winefield, 2003). Winefield (2003) stresses the importance of allowing trainees to reflect on their work. I decided that after learners had finished the exercise, I would facilitate a discussion about how trainees felt about cards in order to assist their learning. The benefit of this type of exercise for learning and facilitating change has been documented, for example, Jaques (2003, p.494) states "Well organised and purposeful group discussion can create a firm foundation for qualities such as openness, networking and proactive communication – important ingredients in the process of personal and organisational change".

In order to consult with learners about their levels of knowledge, I produced a short questionnaire asking participants about their prior knowledge and/or experience of reflection and personal values and their desired learning outcomes (see appendix C16). This revealed a mixture of experience. For example one participant wrote that they had substantial experience of reflective practice during their nursing degree and health visiting diploma however two participants replied that they did not have any experience. As the majority of participants had limited experience of reflective practice, I assumed no prior experience, but included a reading list (see practice log, September, 2006) for those who wished to explore reflective practice in more detail.

In preparation for the training I searched the literature about reflective practice, particularly in relation to healthcare professionals and nurses. I used this material to produce the PowerPoint slides (see practice log, September 2006).

I met with my manager prior to the session and we discussed the advanced training plans. My manager was happy with the plan and felt the training would meet the learners' needs. I arranged to practice the values exercise with a few colleagues prior to the training in order for me to gain feedback on my facilitation skills and allow my manager to see what the values exercise involves.

## Reflection

I felt pleased when my manager asked me to lead this workshop as I felt I could draw on my experiences from using reflection on the Stage 2 qualification and my experience of delivering sexual health training. It was also a good opportunity for me to increase my knowledge of the theory of reflection.

I had previously been a participant on the values exercise on the training course "Train the Trainer in Sexual Health". As a participant I found it a very powerful and enlightening exercise. This exercise is challenging and requires skills on part of the trainer so participants feel comfortable and are open and honest. I felt this exercise suited the purpose of this training perfectly, specifically as it would help participants become aware of their personal values in order for them to write their values statement. Due to the sensitive nature of the exercise, creating a comfortable atmosphere for trainees and setting a Group Agreement would be very important. The training presented a good opportunity for me to further develop my facilitation skills.

After the practice session for the values exercise, I met with a colleague who took part in the exercise and who had prior experience of delivering the exercise. My colleague said I set up the exercise well, and had a friendly manner, which made people comfortable. In terms of my reflection, I felt that the exercise had gone well but it reminded me how important facilitation skills were for this exercise, for example, at the beginning some people started a discussion after someone had placed down a value card and I needed to be assertive and remind people that discussion would take place after the exercise had finished but should not happen during the exercise.

## **4.2 Deliver training programmes encompassing psychological, knowledge, skills and practices**

### **4.2a Implementation of training methods**

I prepared for the training by writing a teaching plan which details the training resources required for the session (see appendix C17). I booked a laptop, projector and flipchart in advance to ensure this would be available on the day of the training.

The workshop utilised a combination of didactic and experiential teaching methods. The didactic method was a PowerPoint presentation and the experiential methods included the values exercise and reflective writing exercise.



To ensure I had acquired the necessary knowledge base to respond to learners during training, I read a number of books and articles on reflection. I had acquired the necessary skills to present training sessions that will maximise learners' development by attending a two day, 'Train the Trainer' course. I had also attended a ten day 'Train the Trainer in Sexual Health' organised by the Centre for Sexual Health and HIV in Sheffield, which focused on how to deliver sexual health sessions.

#### 4.2b Facilitation of Learning

To facilitate students learning, I had read relevant articles on teaching small groups (see Jaques, 2003; Griffiths 1999). Both Jaques and Griffiths write about how the physical environment has a powerful effect on participation and interaction within the group and hence the learning, for example, sitting in a group without a table facilitates communication. I arranged the seating in a semi-circle. I sat as part of the semi-circle, at the same level as the participants. Griffiths states,

"It is well known that communication increases if the differences in social level or status are small. Therefore, part of the tutor's task is to play down the differences in roles and, in particular, play down his or her own authority. This will facilitate the free flow of discussion" (p.101).

I intended the environment to facilitate discussion, but was also aware of the importance of being able to take control if necessary.

I felt the variety of the format of the training would suit each of the four learning styles outlined by Honey and Mumford (1982). I felt the values exercise would suit 'Activists' because the exercise would offer a challenge. I also felt this exercise would suit 'Pragmatists' as it is a practical exercise which is immediately relevant to the theory. To be suitable for 'Reflectors' I felt it was very important to give learners time after each activity to digest what was covered. The theory I gave during the PowerPoint slides would be appropriate for the learning style of 'Theorists'.

The training was delivered as planned to achieve the aims and objectives. At the beginning of the training, I encouraged trainees to ask questions in order for me to support them. I also provided them with a reading list and my contact details so they could contact me after the training with any issues.

I started the session with an "opening round". Each person was asked to introduce themselves by stating their name, job title and say one thing they are looking forward to. I did this purposely in order to involve each person from the

start. I had covered “opening rounds” on a previous course and noted that it is recommended for this purpose (Jaques, 2003).

In order to facilitate learning, at the beginning of the session I asked trainee’s to produce a ‘group agreement’. The importance of a group agreement had been highlighted to me in my training for sexual health and also in my preparatory reading (Jaques, 2003; Griffiths, 1999). This was done in order to create an environment conducive to learning so participants felt comfortable to discuss sensitive topics openly and honestly. I provided reassurance to participants that they were not going to be judged and that their right to be heard would be respected. Creating an environment for trainees to explore these issues in a safe, facilitated environment was an important part of the training.

I gave participants several handouts to facilitate their learning. These were: ‘Phrases to help you reflect’, ‘Gibbs cycle of reflection’, ‘Training review form’, ‘Examples of sentences to use in portfolio - speech bubbles’, ‘A caring moment with Ann’ and ‘Reading List’ (all the handouts can be found in the practice log, September, 2006).

### Reflection

A problem which I did not foresee prior to the training was with the room booking. The session was in the afternoon and on the morning of the training one of the participants telephoned to say she had telephoned the training venue (a health centre) and been told there was no room booked. I contacted the venue myself and they stated they had no record of the booking, although my manager told me she had booked the venue six weeks previously. I was very concerned at this point because it meant I had to find a suitable venue at very short notice and also contact all the participants to inform them of the change in venue. Fortunately I was able to do this and the training went ahead as planned. However it was time-consuming to reorganise. I felt frustrated that I had to rearrange at such short notice and unhappy for inconveniencing the participants. I have learnt from this experience. In future I will telephone the venue prior to the training to ensure a room is booked and get written confirmation at the time of booking.

I enjoy working with small groups. I sometimes find it challenging, particularly as the subject matter is sexual health and therefore sensitive. Griffiths (1999) states,

“Many writers (Bligh, 1986; Griffiths and Partington, 1992) argue that small group teaching is among the most difficult and highly skilled of teaching

techniques...These attributes are best thought of as skills to be developed over a period of time” (p. 96).

I would like to continue developing my skills in small group teaching and have the opportunity to do so in my current job.

#### **4.3 Plan and implement assessment procedures for training programmes encompassing psychological, knowledge, skills and practices**

Formal assessment was not appropriate for this workshop. The nurses will undergo formal assessment for their PSHE certificate by an assessor at the DfES. I chose to assess learning outcomes through confidence ratings. I had not previously used confidence ratings in my teaching or training, but I had read about them (Winefield, 2003) and had learnt about them through being a learner on City University workshops myself. Confidence ratings seemed an appropriate method for this training, especially as the goal of the training was to increase the trainees’ confidence in completing their portfolio concerning their personal values and self-reflection.

I asked trainees to rate their confidence on a scale of 1-10, for both personal values and being able to reflect on their practice. Trainees were asked to complete this at the start and the end of the workshop. The results can be seen in Figure C1.

**Figure C1: Confidence ratings for values and self-reflection before and following the training session**





The figures show that all participants improved in their reported confidence for both understanding of personal values and self-reflection. The average increase in confidence ratings for personal values was 2.6 and for self-reflection was 3.3.

### Reflection

The ratings indicate the workshop was successful in improving participants' confidence to be able to reflect and understand their personal values in sexual health. The ratings suggest that the workshop was more successful in improving participants' confidence for self-reflection as these scores indicate more of an improvement. This may be because I had more aids to help participants for this part of the session, for example, I gave out more handouts to guide trainees in their self-reflection which I did not have for personal values. From my preparation I discovered there is a large literature on reflection and therefore more materials I could draw on, but less is available concerning personal values.

### **4.4 Evaluate training programmes encompassing psychological, knowledge, skills and practices**

My manager was present at the training and we met following the workshop to discuss the results of the confidence ratings and feedback forms. Overall we felt the workshop had gone well. I also asked my manager for her feedback on the workshop by asking her to complete an Observers Report (see appendix C18). Learners were asked to complete a feedback form at the end of the session. The results can be seen in appendix C19. Please note the following percentages are

based on small numbers. In response to 'What did you think of the workshop overall?' and 'What did you think of the content of the workshop?' 50% of participants rated 'quite good' with 25% rating as 'very good' and 25% as 'average'. 75% of participants felt the presentation was 'quite good' and 25% rated 'very good'. All of the participants felt that the level of difficulty was 'about right'. Regarding participants views of their improvement in personal values, one trainee rated 'just about', one 'quite a lot' and one 'very much'. One trainee did not reply to this question. In regard to the question about understanding of reflection, 50% wrote their understanding had improved 'quite a lot' and 50% wrote 'just about'. These differences may be partly accounted for in the differences in trainee's prior knowledge, i.e., some participants had more experience of these areas than others.

The qualitative comments helped identify the factors that contributed to training programme outcomes. Participants commented on finding the values exercise and handouts useful. One participant commented on the atmosphere of the group being comfortable. There was only one comment regarding how the workshop could be improved which was "maybe "speed up" the personal values exercise but does this defeat the object of reflections?" I did purposely keep the values exercise at a steady pace in order to give participants time to think and reflect on their own and others values.

Following the session, my manager and I discussed how inadequacies in learning outcomes or evaluation might be rectified by different approaches to training delivery. We agreed that we would have liked the workshop to be of longer duration to be able to explore personal values more in-depth. I think to do this meaningfully the group would need to spend more time together in order to feel comfortable discussing personal issues.

If I were to deliver the session again, I would change the venue for the training. This session took place in a room which has glass walls and is part of a large open plan office. This location is arguably not a "safe" environment to be discussing sensitive issues. I would select a more private location for future training.

In order to develop my competence to improve my training delivery I have booked to attend a couple of workshops, one on sexual health and drugs and one on working with young men. This will be useful as the PSHE qualification involves an understanding of these issues and it will assist me in answering any questions learners might.

### Reflection

In terms of the training itself, I was pleased with my facilitation skills during the values exercise which was the most demanding part of the training. I feel I had learnt from practising the exercise previously and I believe I was more assertive in terms of asking people to clarify their values and also in creating an environment where people did not discuss the exercise until it had finished. I was pleased that one of the trainee's commented on it being a comfortable group to work within as this is very important for training of this type. I enjoy delivering training of this type and am looking forward to delivering future sessions in order to improve my teaching delivery.

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**Optional Unit of Competence: 5.1 Implementing interventions to change  
health-related behaviour**

Implementing an Intervention: Delivering Stop Smoking Group Interventions





### **Theoretical Background**

Smoking remains the largest preventable cause of premature death and disability in the UK (Raw, McNeill and West, 1998). In 1998 the Department of Health published 'Smoking Kills,' highlighting the dangers of smoking and announcing the establishment of specialist smoking cessation services. These services are now viewed to be part of NHS provision for the foreseeable future (Department of Health, 2001).

I facilitate stop smoking groups for Camden PCT. The intervention is based on withdrawal-oriented therapy (Hajek, 1998). The premise of withdrawal-oriented therapy is that withdrawal discomfort from nicotine addiction is the major remediable obstacle to quitting. Withdrawal-oriented therapy is endorsed by smoking cessation guidelines for health professionals published by Thorax (Raw et al., 1998; West, McNeill and Raw, 2000) and the Department of Health (2001). The medications available to help smokers quit, Nicotine Replacement Therapy (NRT) and Zyban, form a key part of treatment as recommended by the National Institute of Clinical Excellence (NICE, 2002).

Stop smoking groups utilise the benefit of social support in assisting behavioural change (Royal College of Physicians, 2000). Evidence indicates intensive behavioural support and advice from a clinic run by smoking cessation specialists plus NRT or Zyban is the most effective method to help smokers quit (Raw et al., 1998). Hajek (1994) reports that 68% of those attending groups based on the withdrawal-orientated approach will be successful in stopping smoking for four weeks. Between 13-19% of smokers receiving this treatment will be abstinent at 6 months, compared with 2% who receive brief advice from their GP (West et al., 2000). The withdrawal-orientated method is compatible with psychological techniques such as focusing on smokers' beliefs and enhancing self-efficacy.

### **Outline of the Intervention Protocol**

Treatment is based on one hour sessions for seven consecutive weeks. This time structure enables clients to receive support through the most difficult withdrawal period of stopping smoking. It also enables monitoring clients for four weeks after quitting. In accordance with Department of Health guidance (2001), clients are considered to be successful quitters if they have not had a single puff of a cigarette for at least the last two of the four weeks since their quit date.

A brief outline of the intervention protocol is as follows:

Session 1: Information Session: expectations, motivation for quitting and rationale of NRT/Zyban.

Session 2: Preparation Session: coping strategies for stopping and preparation for quit day.

Session 3: Quit Date: last cigarette, start using medication, advice on correct use and feelings about quitting.

Session 4-6: Support Sessions: group support, medication use and goal of total abstinence.

Session 7: Relapse Prevention and celebration of success.

The detailed intervention protocol can be seen in appendix C20.

### **Overview of the Intervention**

At the first session, clients are asked to provide demographic information such as their date of birth, ethnicity and information on their health status. They are also asked how soon after waking they smoke their first cigarette of the day and the number of cigarettes smoked in the last week. These questions are taken from the Fagerstrom Test for Nicotine Dependence (Heatherton, Kozlowski, Frecker, and Fagerstrom, 1991) and provide a good indication of a client's dependence to nicotine.

At the beginning of each of the following sessions clients are asked to complete self-monitoring data (see practice log, April 2005). This includes the number of cigarettes smoked per day in the last week and a questionnaire about withdrawal symptoms. From the second session onwards, clients also have the carbon monoxide (CO) in their expired air measured. This provides an objective verifier of smoking status and acts as a motivational device.

Clients receive a handout at each session reaffirming what was discussed (see practice log, April 2005) and providing contact details of the Stop Smoking Service so group members can contact facilitators between sessions. Client information for the group discussed here can be seen in Table C1. Pseudonyms are used to protect client confidentiality.

**Table C1. Client Information**

| Pseudonym | Age       | Additional Health Information                          | Ethnicity     | Average number of cigarettes per day | Time to first cigarette (minutes) | Sessions Attended | Quit Smoking      | CO reading (Session 2) | CO reading (Session 7) |
|-----------|-----------|--|---------------|--------------------------------------|-----------------------------------|-------------------|-------------------|------------------------|------------------------|
| Tim       | 36        | None   | White British | 20                                   | 5 – 15                            | 1, 2, 4, 5, 7     | Yes               | 14                     | 2                      |
| Paula     | 39        | None   | White Other   | 20                                   | 5 – 15                            | 1 - 7             | Yes               | 51                     | 1                      |
| Claire    | 25        | None   | White British | 10                                   | 15 – 30                           | 1 - 7             | Yes               | 9                      | 1                      |
| Jessica   | 35        | Depression, heart problems, history of eating disorder | White Irish   | 60                                   | < 5                               | 1                 | No                | -                      | -                      |
| Emma      | Not given | None   | White Irish   | 10                                   | > 120                             | 1 - 5             | No                | -                      | -                      |
| Clive     | 39        | Anxiety, worry or panic attacks                        | White British | 30                                   | 5 – 15                            | 1 - 4             | Lost to follow-up | 36                     | -                      |
| Jennifer  | 39        | None   | White British | 30                                   | < 5                               | 4                 | No                | 28                     | -                      |
| Terry     | 61        | Anxiety, worry or panic attacks                        | White Irish   | 15 – 20                              | 5 – 15                            | 1 - 7             | Yes               | 7                      | 2                      |

**Key**

CO = Carbon Monoxide

### **Facilitators Approach and Setting**

Withdrawal-orientated therapy requires the facilitator take a group-orientated approach. This requires that the facilitator avoids responding to every comment made by a group member. Groups are run by two facilitators to help dilute the therapists' authority (Hajek, 1994).

Stop smoking groups are run in a variety of locations across the borough of Camden. This group was held at a health centre close to good transport links. In order to provide a physical environment conducive to discussion, myself and the co-facilitator organised the seating into a circle. This arrangement is important to encourage openness, disclosure and involvement from all group members. Myself and the co-facilitator sat as part of the circle, and we do not sit together in order to disperse attention.

### **Session 1: Assessment, Information, Preparation and Agreement of Goals**

#### **Assessing the suitability of client/s for the intervention (5.1a)**

Clients can be referred to the Stop Smoking Service by health professionals or can self-refer by telephoning a freephone number and booking a place. Clients unsuitable for group treatment (for example, with severe mental health problems and/or learning difficulties, aversion to groups, deafness, unable to speak English, housebound) are identified either on the telephone or at the first session and are offered individual support, with a translator, if appropriate.

#### **Introductions and Structure of the Intervention**

I begin the session by introducing myself and the co-facilitator. I outlined the structure of the stop smoking programme and agreed the order and time-scale of the tasks with clients. These are that the group runs for one hour for seven consecutive weeks, the third week is the quit session and the programme goal is complete abstinence. To motivate and engender positive expectations and self-efficacy, I explained the programme is the most effective treatment to help people quit smoking (West et al., 2000) and therefore they are giving themselves the best chance of success. Following Hajek (1994), it is emphasised that, on average, two thirds of participants will stop smoking by the end of the group and that there is no reason why they should not be one of them.

### Assessing motivation

I asked group members to introduce themselves, to tell the group why they want to give up smoking and any reasons they have for not wanting to give up. This provides an indication of clients' motivation levels and also helps clients to articulate their reasons for wanting to stop smoking. If clients are unsure that they are ready to stop smoking now, they are asked to try and consider their reasons for giving up against their reasons for not giving up and are advised to contact the service in the future when they had made the decision that this is something they really want to do. I also asked clients to describe any past quit attempts and what happened when they went back to smoking. The purpose of this is for clients to articulate anything they found helpful in previous quit attempts and also identifies potential 'trigger' situations for relapse. I asked, "Who would like to start?" to minimise feelings of apprehension people may have about speaking first in front of others.

### NRT and Zyban

I described the treatments available (i.e., NRT and Zyban), providing information about recommended use and possible side-effects as appropriate for withdrawal-orientated treatment (Hajek, 1994). I explained the rationale for using NRT and described each of the six products. I passed around the NRT products in order to increase clients' familiarity and facilitate understanding.

The co-facilitator and I encouraged clients to think about which of the NRT products they would prefer to use. Research indicates there is no difference in the effectiveness of the different types of NRT (NICE, 2002; West et al., 2000). West et al., (2000) recommend the selection of NRT is probably best determined by the smokers personal preference and tolerance for side-effects.

After the session, each client was approached individually to agree with them which treatment they would use. The treatment decision is made in conjunction with the client. As facilitators we consider the clients preferences alongside information about their dependence on cigarettes (i.e., the number of cigarettes smoked, time to first cigarette of the day and CO reading) which they have given on their self-monitoring questionnaire and the behavioural pattern of their smoking. The drug Zyban has to be obtained on prescription and is not suitable for some clients because of their medical history. For example, Zyban lowers the seizure threshold and is therefore not suitable for clients with a predisposition towards seizures, such as people with epilepsy or history of head trauma.

### Group Discussion of NRT

I asked the group if they had any questions about NRT. Tim wanted to go 'cold turkey' and had been reading Allen Carr's (1999) book 'Easy Way to Stop Smoking'<sup>1</sup>. He said he felt addiction to smoking was 'more in the mind' and that when he quits he didn't want to continue to put nicotine into his body. Clive said he had also read Allen Carr and wasn't sure he wanted to use NRT. Claire asked Tim what had happened when he had tried to stop smoking previously. Tim said the longest he had gone without a cigarette was 3 days and that he had become so irritable he had had a cigarette. I explained that NRT would really help with the withdrawal symptoms such as irritability, enabling him and other clients to concentrate on the behavioural aspects of smoking. I pointed out to clients that they were already addicted to nicotine so it would not be a new addiction.

### Preparation for Session 2

I stressed that the two weeks before the quit date are very important in preparing to stop. I suggested clients use the diary provided in the booklet 'Giving up for Life; Don't give up Giving Up' (Department of Health, 2004) so they can record when and where they smoke and identify trigger points for smoking. This would help them to define the environmental (including social) contingencies which have led to and are maintaining the behaviour. Clients were also given a handout asking them to write down their reasons for wanting to give up and not wanting to give up (see practice log, April 2005). This is to help clients come to a positive decision about stopping smoking.

### Identify and negotiate the behaviour change goals of the client/s 5.1b

I prioritised for clients the key goal of the programme was complete abstinence. Clients were asked how they felt about cutting down their cigarettes, in order to seek agreement of this goal. A few clients had tried cutting down and found that it didn't work and had ended up smoking as much as before. For session one it was agreed with clients their immediate goal was to obtain their medication. Clients were either given a prescription to take to the pharmacist or a letter to take to their GP depending on their needs.

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<sup>1</sup> Alan Carr writes, "Just think, how can you possibly cure an addict of addiction to a drug by recommending the same drug? (p.118).

## **Session 2 - Facilitators and Barriers to behaviour change (5.1c & d)**

This session explores the facilitators and barriers to stopping smoking in order for clients to develop strategies to help them when they quit. I began the session by providing examples of situations where smokers commonly have a cigarette (for example, after a meal, with a coffee) and discussed a number of psychological strategies based on classical and operant conditioning and cognitive-behavioural therapy to aid behaviour change.

### **Psychological Strategies:**

*Stimulus control:* As smoking has become associated with many cues in the environment (for example, coffee, meals, ashtrays), clients were encouraged to alter their surroundings. I suggested making small behavioural changes, for example, switching from coffee to orange juice, to help break these associations.

*Response substitution:* I encouraged clients to think of behaviours they could easily introduce that would be incompatible with smoking or where it would be difficult to smoke, for example, taking up new hobbies such as swimming and having breakfast instead of a cigarette.

*Positive changes:* I suggested clients take up enjoyable activities to distract them from smoking and make giving up a more positive experience such as exercise, visiting no-smoking places (such as cinemas) and seeing more of supportive friends and family.

*Social support:* I suggested that group members also tell close friends and family that they are stopping smoking and ask for their support over the next few weeks. This is due to evidence that social support is beneficial (USDHHS, 2000).

### **Barriers and Facilitators of Behaviour Change**

In order for clients to identify the barriers to behaviour change I asked them to discuss circumstances in which they thought it would be difficult for them not to smoke. I then encouraged them to think of their own alternatives to identify facilitators of behaviour change so they were prepared for these situations should they arise.

#### ***Situational: Barriers/Facilitators***

Several members of the group were concerned that it would be really difficult not to smoke in the pub. I suggested they could try switching to a different drink,



such as wine if they normally drink beer and to go out of the pub and get some fresh air if tempted to smoke. I worked with the group to encourage them to think of other alternatives. Claire suggested phoning a friend or using NRT. Tim suggested going to the non-smoking section of pubs and restaurants.

*Behavioural: Barriers/Facilitators*

A number of clients were particularly worried about not smoking when drinking coffee and/or tea. Terry said that he went for coffee every morning with his friend and had about three cigarettes. I encouraged him to think about how he could change this and he decided it would be best to avoid the café for a few weeks and go somewhere else with his friend.

*Cognitive: Barriers/Facilitators*

I asked clients to discuss what they thought about their smoking in order to elicit their cognitions and underlying beliefs associated with their behaviour. Many of the group felt cigarettes really helped when they were stressed. For example, Tim said that he really “needs” a cigarette to relax, when he feels stressed at work and sometimes when he is with his children. I clarified this point by explaining having a cigarette relieves withdrawal symptoms and this stimulates the belief that smoking is relaxing. I started a discussion on alternative ways to relax. Paula said that she found taking deep breaths very helpful and also exercising. Clive said he had a relaxation tape from one of the pharmaceutical companies that produce the NRT products and that this was really good and was free. The other group members were very keen to do this and Clive provided information on obtaining the tape.

It was agreed with clients that their specific and achievable goal for next week was to think of strategies which will help them when they stop smoking and bring them next week to share with the group. Clients were asked to bring their NRT and any cigarettes, ashtrays and lighters which they would throw away during the session. Clients were reminded to have their last cigarette outside before coming to the group.

**Session 3 - Quit Session (5.1 d & e)**

After checking everyone had had their last cigarette, I asked clients to describe how they were feeling and to discuss the preparation they had made. Tim felt worried and was fearful of failing himself and the group by not being able to stop. I acknowledged Tim’s concerns, saying often people felt a mixture of apprehension and excitement. Terry said he was also concerned but felt quite confident because he was finding the group helpful and a great source of

support. I emphasised the importance of obtaining as much social support as possible, and to reinforce this I suggested to group members that they find somebody in the group to be their 'buddy' in order to provide support between the group sessions. It was emphasised that this is optional, so as to reduce any potential discomfort with not wishing to take part. This procedure is recommended by May and West (2000) as a method of increasing social support. Each person who wished to participate was given a 'buddy card' and asked to exchange their telephone number with their buddy and agree a mutually convenient date and time for the first phone call. This is to reduce potential barriers about calling, such as embarrassment. Clients were also reminded that they were welcome to contact myself or the co-facilitator at any time between sessions.

#### Identifying motivators and rewards for behaviour change

I emphasised that it was important for clients to reward themselves for not smoking and asked the group to think of how they could do this. Jennifer said she had worked out she will save £35 a week and was going to treat herself to a new item of clothing each week.

I reaffirmed that as soon as you stop smoking your body starts to gain health benefits in order to motivate and encourage clients. I informed clients that if they reach the end of the group without smoking they would get a certificate celebrating their success, providing another motivator and reward for not smoking.

Clients were asked to take out their NRT and start using it straight away. This is to ensure clients are comfortable about using it and the facilitators can answer any questions.

#### Realistic Expectations

I described some of the common withdrawal symptoms clients may experience from stopping smoking (e.g., cravings for cigarettes, disturbed sleep, irritability etc.) in order for clients to have realistic expectations about quitting. I reassured clients that the majority of the withdrawal symptoms are short-term, lasting less than 4 weeks, although increased appetite may last longer (Royal College of Physicians, 2000).

#### Teach clients skills of self-monitoring and responding appropriately

In teaching clients skills of self-monitoring and responding appropriately, I discussed how it was really important to be aware of withdrawal symptoms from stopping smoking and to know how to deal with them. I instructed clients that if they were feeling any of the withdrawal symptoms acutely such as feeling very irritable, it is likely that they were not using enough NRT. I encouraged clients to keep the list of reasons why they want to give up smoking in a handy place and to refer to it if they are tempted to smoke. Clients were also encouraged to use support from friends and family and to call either of the facilitators before having a cigarette! I emphasised the importance of complete abstinence (i.e., not a single puff) and reminded clients that withdrawal symptoms are short-term and they should soon notice the benefits of not smoking.

#### Develop cognitive-behavioural strategies to deal with possible setbacks

##### Preparation for a lapse

I discussed the possibility of having a lapse (for example, a few puffs or a few cigarettes) in order to help clients prepare for possible setbacks by helping them develop cognitive-behavioural strategies. I said to clients that if they do have a lapse, to reflect on what led them to have the cigarette and think about what they would do instead for future occasions. In order to try and prevent a lapse from damaging clients self-efficacy, I emphasised that a lapse did not mean that their quit attempt has failed, but to use the situation as a learning experience which can then improve the chances of success.

At the end of the session participants threw their cigarettes, ashtrays and lighters into the bin. My co-facilitator asked everyone to set an immediate goal and commitment to the group, for example, Paula said she would not smoke for the next seven days.

#### **Session 4 – Support**

All clients who attended week 3 (quit day) came to week 4 and had not smoked. Everyone had a CO reading of 2 or lower, presenting a great opportunity for the co-facilitator and I to congratulate them. The CO monitor is a useful tool for encouraging motivation as the low reading is a rewarding experience, reminding clients that their hard work is having a positive impact on their health.

I asked clients to tell the group how they found the past week, describe any difficult situations and how they had coped. My aim was to encourage clients to share their experiences and coping strategies in order to generate ideas and support one another. I asked clients about any benefits they had noticed (for

example, breathing easier) in order to tease out positive elements of their experiences to encourage and maintain motivation.

The group reported a mixture of experiences. Tim reported he had been having bad dreams and disturbed sleep but was pleased he had not smoked any cigarettes and this was the longest he had ever gone without smoking. I reassured him that bad dreams are a common side-effect of NRT patches and that disturbed sleep is also a withdrawal symptom of quitting, but is short-term.

Claire found it a lot easier than she had expected. She said that her housemate was only smoking outside and this had really helped. Her breathing had improved and she also felt more energetic so had been going to the gym more and was feeling better about herself.

Terry said he had been feeling really irritable and that he had used more NRT gum when this had happened and that had helped. He said he had also treated himself to good food to reward himself for not smoking. Claire said she had bought 3 new pairs of shoes! Paula said she had too many shoes, but liked the idea of rewarding yourself and decided she would treat herself to some expensive coffee.

I ended the session by asking clients to make a commitment to the group and set an immediate goal for the next week, for example, to not smoke for the next 7 days.

### **Session 5 – Support**

Five clients came to week five and none of them had smoked a single cigarette since quit day. All clients felt that it was getting easier. Tim said he realised he would go for hours without thinking about cigarettes and pointed out a number of benefits, such as now being able to run up stairs without being out of breath and being able to go to non-smoking venues without worrying about not being able to smoke.

Clive said that he had been experimenting with the NRT patch and had been trying to put it on late in the afternoon instead of when he got up. When asked why, Clive said he was worried he would become addicted to the patch and was scared that the hard bit would be when he stopped using NRT. I reassured him the hard part was now, because he was getting less NRT than he would from smoking cigarettes and that NRT patches have different strengths so you can gradually reduce the amount of nicotine. Tim said he had forgotten to put the patch on for one day and had been really “crabby” at work and at lunchtime realised he had not got the patch on. He encouraged Clive to use his patch

everyday. The co-facilitator and I also tried to encourage Clive to use his patch as recommended (i.e. all day, everyday) and to use it for the full 12 week course.

I asked clients to set a goal for the next week and make a commitment to the group.

### **Session 6 – Support**

The majority of group members expressed this week had been easier than the last. Claire said that she was worried about a party at the weekend as her friends would be drinking and smoking. As Claire was talking, other group members were nodding their heads and obviously identified with her. Clive said he had had been out to a party and had planned with his partner that they would leave if the cravings became unbearable. He was fine at first but then he found it increasingly difficult and left early, but was really pleased that he had got through the night without smoking. Other group members made comments such as 'well done'. I felt pleased that the other group members praised Clive and were being supportive of one another and sharing ideas. It reaffirmed my belief in the benefits of group dynamics and sharing experiences.

Paula was less positive, saying that she didn't feel any better and missed her cigarettes. I tried to tease out any positives Paula may have experienced asking her if she felt her breathing had improved, to which Paula replied that it hadn't and that she wasn't sleeping very well and felt she looked 'awful'. I paused at this point to see if any of the group would speak. Terry said that he felt everyone looked better and that although I had said everyone would look better, he hadn't believed me! I was again pleased that the group were supporting one another.

Clients were asked to make a commitment to the group and to set an immediate goal for the next week. I reminded clients that next week was the last session where we would celebrate their success.

### **Session 7 - Support and Relapse Prevention**

Several of the group raised concerns that this was the final session, saying that it helped knowing that you had to come to the group each week and be able to say you had not smoked. I reassured clients that they were welcome to get in touch with myself and the co-facilitator at anytime and that they would be invited to a relapse prevention group in 7 weeks time. The co-facilitator and I handed out clients certificates for stopping smoking (see practice log, April 2005). This is a great opportunity to reward clients for not smoking. All clients who have been

completely abstinent for the last 2 weeks of the group are awarded a certificate to celebrate their success. The co-facilitator and I reminded clients that all NRT is a 12 week course. We spoke to each client individually about their medication and how to reduce their dose if appropriate.

### Relapse Prevention

I discussed that research has identified some of the more common situations associated with relapse. These include having a lapse, social cues such as being around smokers, negative mood and alcohol (Marlatt and Gordon, 1985). I encouraged clients to think about what they would do if they were tempted to smoke in these situations. I gave examples of possible behavioural coping strategies such as drinking water and deep breathing and cognitive coping strategies such as thinking of the health and financial benefits of being a non-smoker or other positive thoughts. Clients were also given a relapse prevention booklet (see practice log, April 2005).

### Evaluation (5.1f)

#### 1) Assess the extent to which the goal/s has/ve been achieved

At the end of the intervention, 66.66% of the group had successfully given up smoking. This figure is based on Department of Health criteria for a successful quitter, which is that the client has been completely abstinent for a minimum of two weeks and was validated by expired CO reading. This figure is similar to the rate reported by Hajek (1994) of 68% and the average quit rate for Camden Stop Smoking Groups which is 66%. Outcomes for Camden Stop Smoking Groups I facilitated independently or with a co-facilitator can be seen in Table C2.

**Table C2: Outcome of Camden Stop Smoking Groups (Facilitated by A Rich - January 2004 – April 2005)**

| Group Code | Start Date | Numbers attending 1 <sup>st</sup> session | Numbers attending 3 <sup>rd</sup> session (quit day) | Numbers who quit | Percentage Quit |
|------------|------------|---|--|------------------|-----------------|
| CR03       | 14/01/2004 | 8   | 5  | 5                | 100.0%          |
| CR04       | 03/03/2004 | 24  | 18   | 11               | 61.1%           |
| CR06       | 21/04/2004 | 14  | 12   | 7                | 58.3%           |
| TH02       | 13/05/2004 | 17  | 13   | 8                | 61.5%           |
| CR08       | 09/06/2004 | 8   | 6  | 4                | 66.7%           |

|                            |            |           |           |          |            |
|----------------------------|------------|-----------|-----------|----------|------------|
| CR09                       | 06/07/2004 | 10        | 7         | 4        | 57.1%      |
| CR12                       | 15/09/2004 | 9         | 8         | 5        | 62.5%      |
| CR14                       | 03/11/2004 | 18        | 16        | 13       | 81.3%      |
| CR16                       | 05/01/2005 | 5         | 4         | 2        | 50.0%      |
| CR18                       | 08/02/2005 | 13        | 9         | 5        | 55.6%      |
| CR17                       | 23/02/2005 | 19        | 15        | 9        | 60.0%      |
| CR19                       | 29/03/2005 | 9         | 6         | 5        | 83.3%      |
|                            |            |           |           |          |            |
| <b>TOTAL<br/>(average)</b> |            | <b>12</b> | <b>10</b> | <b>7</b> | <b>66%</b> |

## 2) Identify the effective components of the behaviour change process

At their last session, clients are asked to complete a feedback questionnaire. The comments from this group and the other groups I have co-facilitated can be seen in appendix C21. This data helps identify the effective components of the behaviour change process. Clients particularly highlighted group support, availability and support of counsellors, provision of medication and a reliable source of information.

## 3) Identify reasons for lack of goal attainment where this occurs

Telephone calls were made to clients who did not complete the course. Jessica and Emma came to the first session only. Emma said she was shortly moving abroad and had decided to quit after moving. Jessica had decided that her life was too stressful to quit now and she would try another time. Jennifer relapsed about 10 days after quit day. She explained that she had taken time off work to look after her daughter and was bored at home. Clive quit for two weeks and told the group he couldn't make session 6 but would be there for the final session. However he did not attend this session and I was unable to contact him.

## 4) Identify any unintended consequences of behaviour change, negative or positive

Tim reported that he had inspired his partner to give up. He reported that his partner had been sceptical about him being able to give up, however having seen his success she had decided to contact the smoking cessation service. Tim has two young children and their house is now smoke-free.

## Completion, follow-up or referral as appropriate (5.1g)

Relapse prevention groups are held every 7 weeks at the end of each clinic and are open to all clients who have successfully completed a group and have

remained abstinent. All clients who have been successful are sent a letter inviting them to attend these groups. In conjunction with the co-facilitator, it was agreed referral to other services was not necessary.

### **Critical Reflections**

The intervention described here follows recommendations from evidence based reviews (Raw et al., 1998; West et al., 2000). The intervention offers structured behavioural support, together with NRT or Zyban, which increases a smoker's chances of stopping by a factor of four (West, McNeill and Raw, 2003). This intervention uses CO monitoring as a motivational tool and to verify smoking status, a procedure recommended by Health Development Agency guidance (West et al., 2003).

### **Outcomes**

In terms of outcomes, the success rate, defined as not a single puff of a cigarette for the last 14 days of treatment, was 66%. This is similar to the figure of 68% for withdrawal orientated therapy provided by Hajek (1994) defined as no smoking for at least the last 7 days of treatment provided. It is higher than the figure of 56% reported by the NHS for all Stop Smoking Services from the period April, 2004 to March, 2005 (Health and Social Care Information Centre, 2005). However this latter figure includes both group and individual treatment as national data based solely on group treatment is not available.

Camden Stop Smoking Service does not collect follow-up data after four weeks due to limitations on resources. Indeed very few Stop Smoking Services have been able to collect long-term follow ups (Ferguson, Bauld, Chesterman and Judge, 2005). However it is expected that relapse rates for this intervention would be similar to those of other Stop Smoking Services. In a recent study comprising nine PCTs, Ferguson et al., (2005) found validated 1-year abstinence rates of 15%, translating to a relapse rate of around 75% among 4-week quitters. This is consistent with clinical trials (for example, West et al., 2000) and published studies (Stapleton, 2001). A criticism of the intervention described here is its inability to offer much help in terms of relapse prevention. Unfortunately there is a lack of evidence about efficacy in this area. In a recent Cochrane review examining interventions to prevent relapse after smoking cessation, Hajek, Stead, Jarvis, West and Lancaster (2005) failed to detect a clinically significant effect of existing relapse prevention methods for people quitting smoking. However studies had both methodological and content



limitations and thus this is an area in urgent need of further research. Ferguson et al., (2005) found those who had started smoking again reported that the most common period for relapse was in the first six months. As a result they conclude there may indeed be some merit in investing in relapse prevention programmes to support smokers in the weeks immediately following treatment.

One positive of the Stop Smoking Services is their cost-effectiveness. Godfrey, Parrott, Coleman and Pound (2005) have calculated that the estimated cost per life-year saved is £684 and even lower at £438 if the potential health care cost savings are taken into account. This is 10 times more cost-effective than the NICE benchmark of £20,000 per quality life-year saved, which is currently used to approve new health care interventions.

### Methods

In terms of methods, the intervention follows closely government guidelines on how to change smoking behaviour. However as Michie and Abraham (2004) point out, the evidence base for this is not clear. Indeed West et al., (2000) in the Thorax guidelines state, "Little is known about the active ingredients of behavioural support so it is difficult to provide evidence based recommendations about the content of behavioural support programmes" (992).

As described in this case study, the intervention uses a mixture of behaviour change techniques, so it is difficult to identify which techniques are effective and the reasons behind their effectiveness. Also we cannot be sure whether the techniques affect the cognitive antecedents they are intended to affect (for example, attitude and self-efficacy) because we do not measure them.

### Psychological strategies

A possible improvement to the intervention would be to teach specific skills using cognitive-behavioural therapy (CBT) techniques. "CBT enables addictive behaviours to be changed by facilitating the control of the psychological processes responsible for, or associated with, the acquisition of the habit" (Marks and Sykes, 2002;18). For example, Marks (2005) discusses using 'Imagery Rehearsal' to help clients, where the client practises imaging themselves coping in a situation where they would usually smoke in order to help them develop the confidence to be able to cope in the real life situation. Clients could also be taught relaxation strategies such as meditation to help them deal with stress. In one study, Mark and Sykes (2002) found that 19.8% of those receiving CBT were abstinent at 12 months, compared with 5.8% in the

control condition, suggesting these strategies are effective in helping smokers to quit.

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**Optional Unit of Competence: 5.2 Direct the implementation of  
interventions**

Directing Stop Smoking Interventions of Health Professionals in Primary Care



## **Needs Assessment explaining why a particular intervention is/was necessary**

### **Introduction**

In line with guidance issued by the Health Development Agency (2003a), Camden PCT's Stop Smoking Service offers both one-to-one support and advice, commonly termed 'Level 2' and group treatment, termed 'Level 3' to smokers wishing to quit.

Level 2 advice is offered by health professionals in primary care, primarily by practice nurses, but also by other professionals including pharmacists, health care assistants and public health assistants. It involves 5 sessions where a trained Level 2 advisor sees a smoker for a preparation session, quit day session and three support sessions over a period of four weeks following their quit day.

Department of Health (2001) Service and Monitoring Guidance outlines the minimum standards for smoking cessation services. These are that all advisors should:

- have received appropriate training for their role
- complete the minimum data set (the individual client data monitoring forms) for each client, fully and accurately, and return the information to the Stop Smoking Service in good time
- offer weekly support for at least the first four weeks of a quit attempt
- attempt to confirm smoking status of all clients self-reporting as having quit at 4 weeks by use of a carbon monoxide (CO) monitor. CO monitors are used because it is motivational for clients, in addition to providing validation of their smoking status.

### **Rationale of the Intervention**

The rationale of this intervention is to equip primary care professionals with the necessary skills and knowledge to conduct Level 2 stop smoking interventions with support from the specialist stop smoking service. Camden PCT is divided into 5 different localities and a specialist stop smoking advisor assigned to each. I have responsibility for the Gospel Oak locality.

Level 2 advice offers greater flexibility for clients than group treatment in terms of location and timing of sessions. In addition, many smokers prefer individual support. Offering services in primary care capitalises "on the fact that most



contacts between patients and the NHS takes place in primary care, providing an enormous opportunity for delivering smoking cessation advice to most smokers over the course of a year” (Health Development Agency, 2003a;8).

A review of the Stop Smoking Service in Camden PCT (2003) identified there was a need to increase provision of Level 2 stop smoking support in order to try to meet the smoking cessation targets set by the Department of Health. The report suggested this could be achieved through more GP practices with active Level 2 advisors and more Level 2 advisors from a variety of disciplines. The report also highlighted there was a need for “improved supervision and support of Level 2 advisors, and monitoring of quality, activity and success rates” (9).

Pharmacists were one professional group presenting definite opportunities for an increase in provision of Level 2 advice. A Patient Group Direction (PGD) had been established enabling pharmacists to prescribe Nicotine Replacement Therapy (NRT) (see practice log, June 2005). This has the advantage of allowing the patient to receive medication and behavioural support from the pharmacist without having to make an appointment with their practice nurse or GP to obtain NRT. Pharmacists are believed to offer a number of advantages compared to other health professionals, for example, appointment-free advice, convenience, including out of work hours, access to an audience not seen by other healthcare professionals and languages that often reflect those of the local community (National Institute for Health and Clinical Excellence, 2005).

The aim of the intervention therefore was to increase provision, particularly among pharmacists, and activity of Level 2 advisors in the Gospel Oak locality and provide them with the support necessary to deliver effective and efficient interventions.

Upon commencing this piece of work, I established the current provision of Level 2 advisors within Gospel Oak. This revealed there were 15 advisors, comprising nine practice nurses, one pharmacist, three GPs and two public health assistants.

## **5.2a Establish needs and implement strategies for the procurement of intervention resources**

### **1. Check resources required for the intervention to confirm their appropriateness and adequacy & 6. Conduct pre-interventions checks to confirm availability of resources for the intervention**

Level 2 advisors need various resources to be able to do a stop smoking intervention efficiently and effectively. These include a CO monitor and tubes, paperwork to monitor the intervention, materials advertising their service and a Level 2 training manual (see practice log, June 2005). The Level 2 manual includes important information, such as information about NRT, Zyban and CO monitors, outline of the treatment protocol and examples of commonly asked questions from clients and the suggested answers.

As a stop smoking advisor myself, I was in a good position to be able to check that the resources were appropriate and adequate. Prior to each training session, I conducted checks to ensure that there were the necessary resources for each advisor. This included printing materials such as the training manual, preparing materials published by the Department of Health, such as the booklet 'Giving Up for Life' and the Stop Smoking Service promotional materials such as posters and leaflets (see practice log, May 2005). I made sure that there were sufficient CO monitors for advisors upon completion of their training. I informed my line manager and project support officer if materials needed to be ordered.

### **2. Specify the competence, experience, knowledge and qualifications of people required**

To be able to offer stop smoking advice, Level 2 advisors are required to attend a one-day training course run by the specialist stop smoking advisors, such as myself, at Camden PCT. Level 2 advisors typically work in a healthcare setting or in organisations where they would be supported to do this work, such as Sure Start.

### **3. Anticipate problems and incorporate contingency strategies into plans**

A number of problems were anticipated, so contingency strategies were developed. These included:

1) Anticipated Problem: There is a problem with the work of the Level 2 advisor, such as a lower than average quit rate or completion of the necessary paperwork is unsatisfactory.

Proposed Solution: It is the role of the relevant specialist stop smoking advisor to provide feedback and support to the Level 2 advisor to try to improve the situation.

2) Anticipated Problem: Each Level 2 advisor was given a named contact at the Stop Smoking Service, for example, I was the contact for all advisors in Gospel Oak. One anticipated problem was the absence of the specialist stop smoking advisor, for example, due to sickness or leaving the service.

Proposed Solution: If unable to contact their specialist stop smoking advisor, Level 2 advisors were informed to telephone the project support officer who will pass the details onto another advisor to deal with the query. Level 2 advisors will be informed if their specialist stop smoking advisor leaves the service.

3) Anticipated Problem: Level 2 advisor leaves their place of work or is no longer able to provide the service.

Proposed Solution: Level 2 advisor should inform the Stop Smoking Service if they are no longer able to provide the service.

#### 4. Conduct negotiations with relevant others to ensure that personnel and other resources are available at the appropriate times and in sufficient quantities for the intervention to be efficiently and effectively conducted

To enable personnel to attend training, training dates are specified well in advance. I liaised with the Pharmaceutical Advisor at the PCT to ensure pharmacists would receive payment for a locum. Occasionally it was necessary to negotiate with the Practice Manager of a GP practice to explain the importance of staff being able to attend the training and regular update sessions to maintain and develop their skills.

It is my responsibility to ensure that Level 2 advisors have the necessary resources to conduct the intervention following training. I contact the Level 2 advisors on a regular basis to check they have sufficient resources. Level 2 advisors are also encouraged to telephone the Stop Smoking Service and request resources.

#### 5. Complete the documentation necessary to procure appropriate and adequate personnel and other resources within relevant time-scales

Preparation for Level 2 training includes organising resources for the training, for example, arranging a venue and obtaining technical equipment, such as a projector and laptop. It also requires sending out invitations to attend the training

in advance (minimum of 1 month) so Level 2 trainees could attend and arrange suitable cover at their workplace.

In addition to attending the Level 2 training, pharmacists attend a two hour session on using the PGD to prescribe NRT. This involved negotiating with Camden PCT's Pharmaceutical Advisor to find a mutually convenient date when they were available to deliver this training.

As a trainer on the Level 2 training course, myself and the other trainers needed to allow sufficient time to prepare the resources needed for training.

#### 6. Conduct pre-interventions checks to confirm availability of resources for the intervention.

Please see 1 above.

### **5.2b Assess the capabilities of the people required to conduct and monitor the intervention**

#### 1. Seek personnel with appropriate competences, experience and qualifications

Personnel are identified by one of the stop smoking team, such as myself, as a priority for training (for example, if the GP practice does not have a Level 2 advisor) or identify themselves by directly contacting the Stop Smoking Service and expressing an interest.

Personnel who express an interest in working in smoking cessation, believe they have the capacity to deliver Level 2 advice and who work in a healthcare setting (or who work in an organisation that would be supportive of their work) are sent an invitation to attend training.

#### 2. Make necessary checks to ensure capability and competence of staff to be used within the intervention & 3. Identify areas of skill development and take actions to develop necessary skills

To be able to become a Level 2 advisor, personnel must attend the one day training course. The training equips advisors with the necessary knowledge to be able to carry out the intervention and gives trainees an opportunity to practice the behavioural skills needed, for example, taking part in role plays to practice providing behavioural support to clients. After training, Level 2 advisors attend update sessions every six months to maintain and develop their clinical skills.

#### 4. Agree and document pre-intervention staffing needs and procedures instituted by those conducting the intervention

At the training, trainees are informed of the necessary time commitment involved in giving Level 2 advice, i.e., that the advice involves 5 sessions, lasting between 20 and 30 minutes. It is stressed that evidence shows behavioural support is an essential part of the treatment package and that they should only sign up to provide Level 2 advice if they feel they have the time to do so. Following training, personnel are asked to sign a 'Service Level Agreement' (SLA) which stipulates their responsibilities as a Level 2 advisor (see appendix C22).

A system of financial payment for pharmacists had been established by the PCT in line with the PGD in order to reimburse pharmacists for their time conducting the intervention. This system involves paying pharmacists per session, totalling a maximum of £45 for the 5 sessions. Pharmacists are also reimbursed for the NRT they supply at cost price.

#### **Supervision Plan**

##### **The Purpose of Supervision.**

It is my role to:

- Contact potential advisors in the Gospel Oak locality to ensure there is a good geographical spread of advisors across the locality
- Train potential advisors by running the Level 2 one day training course and Level 2 update training
- Provide initial and ongoing support in terms of advice (behavioural and technical), encouragement and provision of resources. For example, this may include advice on NRT and Zyban, dealing with complex clients, advice on CO monitoring and completing the necessary paperwork
- Act as main point of contact for Level 2 advisors in Gospel Oak
- Monitor and evaluate performance and provide feedback to advisors.

#### **Supervision Process**

The supervision process begins with the professional attending Level 2 training. I then support them to do the intervention through a face-to-face initial visit and then by providing ongoing support via face-to-face visits and telephone contact.

### **5.2c Advise and guide the activities of designated others**

#### **1. Communicate to relevant individuals the roles and responsibilities within interventions**

The role and responsibilities of delivering the intervention is communicated during the Level 2 training itself and further outlined within the SLA. Trainees are informed there is a 'cooling off' period after the training to allow them to think carefully whether they have the capacity to deliver Level 2 advice.

At the first visit I clarified the roles and responsibilities of being a Level 2 advisor by using the SLA. I checked with the advisor they understood what was expected of them, for example, to provide 5 sessions per quitter of one to one evidence-based stop smoking treatment and behavioural support and what they could expect from me, for example, I will provide support to advisors who are experiencing problems with any aspect of the service.

#### **2. Provide information, advice and guidance that is sufficiently detailed to meet recipient needs prior to and during the intervention**

At the Level 2 training, trainees were given the necessary information and guidance to be able to deliver the intervention. Training includes the nature of addiction including withdrawal symptoms, medication to help smokers quit (NRT and Zyban), using the CO monitor and behavioural skills training, such as helping smokers develop coping strategies to aid with quitting. After training, advisors are sent an SLA asking them that if they feel they have capacity to provide the intervention, to complete the SLA and return it to myself.

Upon receipt of the SLA, I visit the Level 2 advisor at their workplace. The purpose of this visit is to provide the advisor with the resources they need to complete the intervention. It is also an opportunity for me to provide guidance and support, answer any questions and discuss potential difficulties and try to identify solutions. At this visit we discuss practical issues, such as a reminder of how to use the CO monitor and when to prescribe NRT. This visit is also about trying to build rapport and a supportive relationship between myself and the advisor as I want the advisor to feel comfortable about approaching me in the future to obtain further support and advice.

At the initial visit, advisors are given promotional material to advertise the service, such as specially designed posters with their contact details, freephone cards, the Stop Smoking Service leaflet and maps of Level 3 Stop Smoking Groups (see practice log, May 2005). Pharmacists were encouraged to inform the GP surgeries in their surrounding area that they could now offer this service.

They were also encouraged to be proactive and use opportunities from customers to enquire about smoking, such as when supplying medication to help with coughs and chest infections.

3. Implement the necessary monitoring and feedback systems for those conducting the intervention to ensure that current information is available to those carrying it out

The Level 2 training includes a section on completing monitoring data. All Level 2 advisors are required to complete a Monitoring Form (appendix C23) for each client and return this to the Stop Smoking Service where this data is entered onto a secure database.

At the initial visit, I went through the monitoring form, stressing the importance of filling in all of the information asked for on the form and asking the client to sign their consent for receiving treatment. The information retrieved from the monitoring forms is used as a method of feedback, for example providing advisors with their quit rate.

4. Discuss potential and actual difficulties and propose solutions

During visits, I discussed with advisors potential and actual difficulties and suggested solutions. Some examples are:

Clients who Did Not Attend (DNA): One difficulty concerned clients who did not return for follow-up support and how to deal with this and document it. I suggested to advisors that they telephone the client and ascertain the reason for not attending and document this on the monitoring form. Some advisors raised concerns about calling clients because they did not want to be seen as harassing them. I explained that there are a number of reasons clients may not attend including because they had a lapse or they may have simply forgotten. I also showed that by asking clients to sign their consent on the monitoring form they are agreeing to be contacted again for follow-up and suggested that they explain to clients that it is part of the service that they would like to telephone them if they do not attend a session.

Time constraints: A few pharmacists expressed concern that they would not have time to see a client for 20 minutes if it was during a busy period. I suggested to pharmacists that they make appointments for clients during their less busy periods, for instance when the GP practices were closed and they would be dispensing less frequently. Level 2 advisors were also encouraged to refer particularly dependent clients or clients who need more intensive support

to the Stop Smoking Service. Advisors were given a referral form to assist with this (see practice log, May 2005). They were also given information about the specialist advisor for young families and pregnancy to which they could refer.

Attracting clients for the intervention: During the intervention, a Level 2 practice nurse contacted me explaining that she was having difficulties attracting clients for the intervention. We worked together to develop a flyer which outlined the Level 2 service which could be displayed in the waiting area and could be used by the GPs to give to patients who they referred to the Level 2 service (see practice log, June 2005).

**Ongoing Support:** After the initial visit, supervision included telephone contact with advisors and visits at their workplace. One of my main roles is to provide psychological advice to advisors, for example answering queries about clients who continue to have a small number of cigarettes, clients who lapse and relapse, about cannabis use, and advice on medication. I would also ask advisors how they were finding the work and discuss some of the clients they were seeing. On these visits I tried to build rapport so the advisor would feel comfortable discussing their work with me.

It was also my role to provide Level 2 update training to advisors every six months to provide them with an opportunity to update their skills. I also provided more intense supervision to two health care assistants in a GP practice by observing their work on a weekly basis (see practice log, May - September, 2005) and supervision to two public health assistants on a monthly basis (see practice log, April to September, 2005).

5. Implement strategies for dealing with complaints and appeals to ensure that the intervention team and clients have access to information, advice and guidance from those who are directing the intervention & 6. Deal with complaints and grievances sensitively and promptly.

Level 2 advisors were given my contact details (address, telephone, fax and email) and asked to contact me if they had any problems. If I was contacted I would deal with the query if appropriate for me to do so. Any complaints were reported to my line manager as soon as possible. As part of my role in the Stop Smoking Service, I take the lead on matters regarding pharmacists. In this role, I received a few complaints from pharmacists on delays regarding payment for NRT and for the advice sessions. The Stop Smoking Service itself does not deal with the payments. Payments are calculated and processed by the



pharmaceutical advisor and finance department at Islington PCT (the PGD is joint between Camden and Islington PCTs). In order to try to resolve these issues, my manager and I had a meeting with the pharmaceutical advisor in order to try to agree systems and procedures to minimise problems and therefore complaints (see practice log, April 2005). At this meeting we agreed a number of changes, for example, the pharmaceutical advisor to send details of payments made to the Stop Smoking Service so we can have a record in case of queries.

Initially, I also received complaints from some pharmacists about completing the necessary paperwork because it was felt to be overly complicated and difficult to complete. Pharmacists needed to fill in separate forms for the NRT supplied and the advice sessions given. To address this situation, with the lead advisor for pharmacy at Islington PCT, I developed simplified paperwork and produced a pad with carbon copies (see practice log, April 2005). This is a major improvement because it allows pharmacists to record the medication they supply and the advice sessions given on the same form. Also, because they are carbon copies it allows the pharmacist to keep a record of their intervention without having to photocopy documentation. Pharmacists reported the new paperwork was much improved and I have not received any complaints from newly trained pharmacists who use the new paperwork.

## **5.2d Ensure technical support for a planned intervention**

### **1. Assess needs for technical support and advice**

When establishing the resources required for the intervention, the needs of advisors in terms of technical support were assessed. It was felt that Level 2 advisors would need technical support particularly in the use of the CO monitor. Use and maintenance of the CO monitor is covered at the Level 2 training, however it was also envisaged that Level 2 advisors would need ongoing technical support in case of problems with the machine, such as it not working and giving spurious readings.

### **2. Discuss and communicate the nature and purpose of any technical support & 4. Establish systems to provide technical support to staff, clients and relevant others at appropriate times within the interventions/contract period**

Advisors were given their own CO monitor and a supply of mouthpieces. At their first supervision visit, I discussed how to use the monitor and asked the advisor to demonstrate using it. This was to ensure the advisor felt competent in using

the machine. Advisors were shown how to replace the battery and given an instruction booklet. Advisors were asked to take a reading from each client for every session as it is an important motivator for clients and also provides an objective measure of smoking status. Advisors were asked to contact myself if they needed more CO tubes and if they had a problem with the CO monitor.

### 3. Seek and acquire technical advice and support appropriate to the needs and requirements of the intervention

I sought technical advice from an experienced Stop Smoking Advisor within the team on how to calibrate the CO monitors. In addition, weekly team meetings with members of the Stop Smoking Service provided an opportunity to discuss any issues and obtain advice. I also sought advice from the pharmaceutical advisor when I had queries about issues specific to pharmacists, such as payments for sessions they provided and NRT supplied.

### **Monitoring Effectiveness and Providing Feedback; 5.2e Oversee and direct the conduct of a planned intervention**

#### 1. Implement and continually appraise systems and procedures to ensure that all psychological and other practices are ethically and competently conducted in accordance with the agreed intervention plan

In order to try and ensure that psychological and other practices are ethically and competently conducted, all advisors are given a copy of the treatment protocol (see appendix C24). This is a document providing a structured protocol outlining each step of the intervention. This is designed to assist Level 2 advisors to deliver the intervention by guiding them through the necessary steps. This system helps ensure that the intervention is conducted competently in line with the agreed intervention plan.

All Level 2 advisors are required to complete a monitoring form, which provides information about their intervention. This information is required by the Department of Health and is utilised by myself to monitor the activity levels and quit rates. The monitoring form also provides an indication of the quality of the intervention as it provides me with important information, such as whether the advisor had been taking CO readings and how many sessions they had provided. It was my responsibility to contact the advisor if this data is incomplete and provide regular support to help them in providing the intervention.

There is a section on the monitoring form for clients to provide written consent for their information to be held on the Stop Smoking Service database. In line

with the NHS Code of Confidentiality (2003), it is the responsibility of the advisor to explain their data will be returned to the Stop Smoking Service in order to monitor the quality of care provided.

2. Implement systems and procedures so that data of a sensitive and confidential nature are disclosed only within appropriate security agreements and ethical frameworks:

As part of the Level 2 intervention, monitoring forms are sent to Stop Smoking Service and client information is held on a secure database within Camden PCT. It is only possible for members of the Stop Smoking Service to access this database.

3. Obtain consents and approvals for any agreed deviations to the intervention

If a deviation is suggested to the intervention, I seek consent and approval from my line manager and pharmaceutical advisor if applicable.

4. Ensure that problems lying outside the scope and competence of those conducting the intervention are handled appropriately, effectively, sensitively and promptly by those directing the intervention

Each advisor in Gospel Oak was asked to contact me if they had any problems. If the problem was regarding stop smoking advice, then I handled the problem as effectively, sensitively and promptly as possible. If the query was to do with issues beyond my control, such as payment problems then I referred these to my manager and/or the pharmaceutical advisor as soon as possible.

5. Establish and use effective communication systems when implementing the intervention

A number of communication methods were used, including face-to-face, telephone, post, fax and email. I found email to be particularly effective means of communication with staff working in general practice because they are often in clinics and therefore quite difficult to contact. Unfortunately email was not available to all practice staff, and in this case I used more traditional forms of communication. I have my own answer phone for advisors to leave messages. In addition all the advisors in Gospel Oak were given the general contact details for the Stop Smoking Service. This proved to be effective, as if I was not in the office there was always someone else the advisor could contact.

#### 6. Implement conciliation and arbitration strategies relevant to the intervention to deal with disagreements about practices, procedures and outcomes

As discussed above, the main source of disagreement surrounded payment for pharmacists. I and the other members of the Stop Smoking Service received complaints from pharmacists of payments being several months late.

It was necessary to implement conciliation and arbitration strategies between pharmacists and the pharmaceutical advisor who processed payments. I did this by reassuring pharmacists that the matter was being dealt with and meeting with the pharmaceutical advisor to inform them of the complaints and develop ways of speeding up the payment process, such as faxing forms to be processed on a monthly basis.

#### Reflection of the problems encountered in implementing the intervention and supervising its implementation

##### Paperwork (pharmacists)

As outlined above one problem initially was that pharmacists found the paperwork for the PGD difficult to complete. This led to me, in conjunction with an Advisor at Islington PCT, to re-design the paperwork. On reflection this experience has shown me the importance of simple, easy to use paperwork in implementing interventions. It has also shown me the benefit of carbon copies which allows both parties to hold a copy of client records without photocopying the information.

##### Payments (pharmacists)

As outlined above, a number of pharmacists reported delays in receiving payment for their work and supply of NRT. This experience has shown me the complexity of directing interventions, particularly when a number of parties have responsibility for different procedures.

##### Resource allocation

Supporting the work of the Level 2 advisors involved a great deal of resources, particularly in terms of time. A considerable proportion of this time was spent travelling to and from the advisors place of work. Although advice could be given over the telephone, certain tasks required a visit, such as replacing/checking CO monitors, delivering resources and any observation of the advisors work. I tried to use my time efficiently, for example visiting advisors who were located close together at the same time. This has given me insight into the resource allocation necessary to direct the implementation of interventions.

### Issues with data quality

The monitoring forms advisors are required to complete and return to the Stop Smoking Service provided a means of evaluating their work. It requires the advisor to collect essential information such as the clients demographic details, number of cigarettes smoked a day, time to first cigarette and the clients CO reading. Advisors are asked to return the form to the Stop Smoking Service when they have completed the intervention. There were a few problems with completion of the monitoring forms, for example, some advisors returned them with important information missing, such as the CO reading of the client, date of birth or not ticking the box to indicate whether or not the client had smoked in the last two weeks. It proved to be very time consuming to telephone the advisor or client to request the missing information.

I tried to improve the situation by providing advisors with an example copy of a well completed form, showing them the guidelines for completing the forms, and stressing the importance of completing all sections of the form.

### Quality of service provided by Stop Smoking Level 2 Advisors

Table C3 illustrates the number of clients Level 2 advisors in the Gospel Oak locality have seen between January, 2004 and June, 2005 and their quit rates by profession. As can be seen in Table C3, advisors vary considerably in terms of the number of clients seen and their quit rates. Table C3 shows that some practice nurses saw fewer clients as time progressed. During my time in post there was a shortage of permanent full-time nurses and it is likely that this decreased their capacity to see patients for smoking cessation advice. In addition the number of pharmacists in the Gospel Oak area providing stop smoking support increased from one to six, creating an opportunity for clients to be seen outside GP practices.

Overall for Camden PCT, the quit rate for primary care is 42% and pharmacy is 48%. Both of these quit rates are lower than the national average quit rate for April 2004 – March 2005 which was 56% (Health and Social Care Information Centre, 2005).

**Table C3: Performance of Level 2 advisors (Gospel Oak Locality)**

| Pharmacists |              | Jan - June 2004 |           | July - Dec 2004 |           | Jan - June 2005 |           | Overall    |           |
|-------------|--------------|-----------------|-----------|-----------------|-----------|-----------------|-----------|------------|-----------|
| Advisor No. | Date Trained | No Clients      | Quit Rate | No Clients      | Quit Rate | No Clients      | Quit Rate | No Clients | Quit Rate |
| 527         | 13/11/03     | 2               | 0%        | 4               | 50%       | 17              | 65%       | 23         | 57%       |
| 474         | 12/05/04     | 2               | 0%        | 23              | 61%       | 32              | 72%       | 57         | 65%       |
| 504         | 12/05/04     | -               | -         | 5               | 40%       | 2               | 0%        | 7          | 29%       |
| 655         | 05/11/04     |                 |           |                 |           | 17              | 59%       | 17         | 59%       |
| 658         | 05/11/04     |                 |           |                 |           | 1               | 100%      | 1          | 100%      |
| 54          | 25/04/05     |                 |           |                 |           | 16              | 50%       | 16         | 50%       |

| Practice Nurses |              | Jan - June 2004 |           | July - Dec 2004 |           | Jan - June 2005 |           | Overall    |           |
|-----------------|--------------|-----------------|-----------|-----------------|-----------|-----------------|-----------|------------|-----------|
| Advisor No.     | Date Trained | No Clients      | Quit Rate | No Clients      | Quit Rate | No Clients      | Quit Rate | No Clients | Quit Rate |
| 479*1           | 03/04/03     | 28              | 75%       | 2               | 100%      | -               | -         | 30         | 77%       |
| 451             | 27/06/02     | 13              | 23%       | 13              | 40%       | 4               | 0%        | 30         | 23%       |
| 213             | 23/09/03     | 67              | 73%       | 21              | 57%       | 8               | 50%       | 96         | 68%       |
| 313             | 06/09/01     | 18              | 56%       | -               | -         | 8               | 63%       | 26         | 58%       |
| 31*2            | 07/06/99     | 37              | 35%       | 18              | 28%       | 9               | 89%       | 64         | 41%       |
| 452             | 27/06/02     | 15              | 53%       | 36              | 25%       | 40              | 16%       | 91         | 36%       |
| 523             | 13/11/03     | 15              | 73%       | 19              | 42%       | 18              | 17%       | 52         | 42%       |
| 511             | 13/11/03     | 4               | 75%       | 28              | 46%       | 29              | 28%       | 61         | 39%       |
| 401             | 21/02/02     | 10              | 40%       | 1               | 100%      | 8               | 75%       | 19         | 58%       |

\*1 Left the GP practice during the period July – December 2004

\*2 Left the GP practice during the period Jan – June 2005

**Table C3: Performance of Level 2 advisors (Gospel Oak Locality) (cont.)**

| <b>GPs</b>  |              | Jan - June 2004 |           | July - Dec 2004 |           | Jan - June 2005 |           | Overall    |           |
|-------------|--------------|-----------------|-----------|-----------------|-----------|-----------------|-----------|------------|-----------|
| Advisor No. | Date Trained | No Clients      | Quit Rate | No Clients      | Quit Rate | No Clients      | Quit Rate | No Clients | Quit Rate |
| 46          | Not known    | 10              | 60%       | 22              | 50%       | -               | -         | 32         | 53%       |
| 603         | 16/02/04     | 6               | 0%        | 3               | 33%       | -               | -         | 9          | 11%       |
| 981         | Not known    | 68              | 41%       | 11              | 18%       | 17              | 18%       | 96         | 34%       |

| <b>Health Care Assistants</b> |              | Jan - June 2004 |           | July - Dec 2004 |           | Jan - June 2005 |           | Overall    |           |
|-------------------------------|--------------|-----------------|-----------|-----------------|-----------|-----------------|-----------|------------|-----------|
| Advisor No.                   | Date Trained | No Clients      | Quit Rate | No Clients      | Quit Rate | No Clients      | Quit Rate | No Clients | Quit Rate |
| 63                            | 25/04/05     |                 |           |                 |           | 1               | 100%      | 1          | 100%      |
| 64                            | 25/04/05     |                 |           |                 |           | 2               | 0%        | 2          | 0%        |

| <b>Public Health Assistants</b> |              | Jan - June 2004 |           | July - Dec 2004 |           | Jan - June 2005 |           | Overall    |           |
|---------------------------------|--------------|-----------------|-----------|-----------------|-----------|-----------------|-----------|------------|-----------|
|                                 | Date Trained | No Clients      | Quit Rate | No Clients      | Quit Rate | No Clients      | Quit Rate | No Clients | Quit Rate |
| 600                             | 4/12/03      | 38              | 39%       | 29              | 31%       | 42              | 31%       | 109        | 34%       |
| 566                             | 4/12/03      | 0               | 0%        | 4               | 25%       | 12              | 58%       | 16         | 50%       |

In addition to the lower than average quit rates, through informal conversation with advisors after training and through observing some of their sessions, it was clear that some advisors lacked knowledge and skills. A likely reason for this is that the one day training course is insufficient time to train advisors. Over the period of time I was supervising the implementation of the intervention this became increasingly clear to me. This idea was reinforced when I supervised two health care assistants at a GP practice. For example, after their training they found it difficult to remember fundamental aspects of the intervention such as how to use the CO monitor and the different NRT products available.

In addition, it is possible that quality suffered because of the quantity of advisors trained. I found it difficult to provide intensive support to advisors as this was just one aspect of my job. Within the Stop Smoking Service, we began to have discussions about whether to cease training new Level 2 advisors due to the large number already trained and the constraints in being able to support large numbers of advisors.

I felt frustrated about the quality of interventions clients would receive in primary care. My colleagues and I raised our concerns regularly during team and clinical meetings. Towards the end of my time in this post, my line manager asked a colleague to write a proposal to increase the training to two days. This is to be presented to the Stop Smoking Advisory Group who will assess this proposal.

The need for standards in training in smoking cessation treatments has been acknowledged nationally (HDA, 2003b). There has not been a coordinated approach to the content or quality of training in this field. In response to this, the HDA (2003b) has produced an outline of training standards expected and is working towards accrediting smoking cessation courses. Further, the HDA (2005) has recently published 'Skills and competencies framework for trainers of smoking cessation treatments', with the aim of improving the effectiveness of Stop Smoking Services by raising the standard of training of stop smoking advisors working in NHS services.

#### Reflection: Developments in myself

Initially I was daunted at the prospect of training and supporting health professionals, such as pharmacists and nurses, because previously my only contact had been as a patient as opposed to working in a professional capacity. My competence and confidence as a Stop Smoking Advisor and in supporting others developed over time. This was reflected in my approach with advisors; as I became more confident and competent myself, I felt more comfortable offering



sessions where I could observe their work and provide feedback. I really enjoyed this aspect of the work as I found it very rewarding to feel I could assist others in developing their skills and providing a better quality service.

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# **SECTION D: SYSTEMATIC REVIEW**



## **Psychological interventions for weight loss maintenance for obese or overweight adults: A systematic review**

### **ABSTRACT**

#### **Background**

Overweight and obesity are a major public health concern. Helping people to maintain their weight loss is arguably the most pressing problem in the management of obesity.

#### **Objectives**

To review psychological interventions aimed at helping people maintain weight loss.

#### **Method**

**Search strategy:** Multiple electronic databases were searched from January 1996 until January 2006. Other strategies included manually checking reference lists, contacting authors and searching via a number of relevant websites for ongoing and existing trials.

**Selection criteria:** Trials were included if they: 1) were randomised controlled trials of a psychological maintenance intervention versus a comparison intervention, 2) measured weight change, 3) had a minimum follow-up of 12 months and 4) examined overweight or obese participants who had been on a weight reduction programme.

**Data extraction:** 685 abstracts were retrieved. Two people independently applied the selection and inclusion criteria to the studies and assessed study quality.

**Quality assessment:** The following were indicators of methodological quality: random allocation, blinding, attrition, intention to treat and power.

#### **Results**

Six studies were included. Two studies found a positive effect on maintenance of weight loss. Interventions tended to utilise behavioural weight reduction strategies, but some also included group problem-solving and peer support programmes. The results suggest a promising approach is therapist led group problem-solving therapy. However it is impossible to draw firm conclusions about the effective components of psychological interventions without further research.

Methodological problems include: small sample sizes, lack of power, short-term follow-ups and heterogeneity of interventions.

### **Conclusions**

There is insufficient research on psychological interventions for weight loss maintenance for definite conclusions to be drawn. Research with larger and more diverse samples is urgently required.

## **INTRODUCTION**

### **Prevalence of obesity**

Obesity has been defined in various different ways. In most countries it is defined as a body mass index (BMI) of greater than 30 kg/m<sup>2</sup> and overweight as a BMI of 25 to 30 kg/m<sup>2</sup>. Epidemiological data demonstrate the prevalence of obesity has been rapidly increasing. According to the latest figures, the proportion categorised as obese increased from 13.2% of men in 1993 to 23.6% in 2004 and from 16.4% of women in 1993 to 23.8% in 2004 in England (Department of Health, 2005).

Evidence shows certain groups are more at risk of being obese than others. People from lower social classes are more at risk. The trend is particularly noticeable in women. In England the prevalence of serious obesity in women increases from 18.7% of managerial and professional women classified as obese compared with 29.1% of women in routine occupations (Department of Health, 2005).

With the exception of Black Caribbean (25%) and Irish (27%) men, men from minority ethnic groups had markedly lower obesity prevalence rates than those in the general population. Prevalence was highest in Black African (39%), Black Caribbean (32%) and Pakistani (28%) women, and lowest among Chinese women (7.6%) (Department of Health, 2005).

### **Health risks**

Evidence suggests that the obese are at increased risk of a number of diseases, including chronic disease such as osteoarthritis, chronic back pain, cardiovascular disease, certain cancers and type 2 diabetes mellitus (Avenell, Broom, Brown, et al., 2004). Obesity is implicated in the causation of: coronary heart disease (CHD); congestive cardiac failure and cerebrovascular disease (Sempos, Durazo-Arizu, McGee et al., 1998).

Studies comparing obese and non-obese people have generally failed to find differences in psychological functioning, however in a recent Cochrane review of 'Psychological Interventions for overweight or obesity', Shaw, O'Rourke, Del Mar et al. (2005) argue it is likely these findings are due to limitations in research. In addition, "studies which demonstrate that the effects of weight loss appear to be psychologically favourable with improved self-esteem, social functioning and sense of wellness support the notion that excess weight is associated with higher levels of psychological morbidity than normal weight" (Kushner and Foster, 2000 cited in Shaw et al., 2005, p4).



### **Interventions for weight loss**

Treatments for obesity include surgery, pharmacotherapy (for example, orlistat, sibutramine and metformin), low fat diets, low calorie diets, exercise and behavioural therapy (NHS Centre for Reviews and Dissemination (CRD), 1997). The conclusions of the recent "Systematic review of the long-term effects and economic consequences of treatments for obesity and implications for health improvement" found all these treatments had some beneficial effect in the treatment of obesity, with the exception of low calorie or very low calorie diets for which there is insufficient evidence (Avenell et al., 2004).

### **Maintenance of weight loss**

Unfortunately even when people do manage to lose weight, data indicates that the majority of people regain the weight loss by follow-up (NHS CRD, 1997). Clients typically regain 30% - 50% of their lost weight in the year following behavioural treatment, and 5-year follow-up studies routinely show a mean regain of 100% of lost weight (Brownell and Wadden, 1992; Thomas, 1995). Thus, maintenance of weight loss has been described as the "single most pressing problem in the clinical management of obesity" (Wing, Jeffery, Hellerstedt et al. 1996; p.172). An assessment of the need for a systematic review in this area is warranted.

### **Assessing the need for a review**

Searches were carried out to ascertain whether there are any existing reviews on the maintenance of weight loss for obesity using psychological interventions. This included searches in the Cochrane Database of Systematic Reviews (CDSR), Health Technology Assessment (HTA) database and the National Research Register (NRR). These searches revealed that there was not an existing review specifically investigating psychological interventions for weight loss maintenance in the treatment of obesity, although there are two relevant existing reviews.

In 1997, the NHS CRD published a systematic review on the interventions and prevention of treatment of obesity and the maintenance of weight loss. A multitude of electronic databases were searched from their starting date to the end of 1995.

This review identified five studies which investigated the effect of continued therapist contact and concluded that the evidence for the effectiveness was unclear. Three studies did not find a statistically significant difference in support

of extended contact at follow-up. Adding self-help peer groups with therapist-led booster sessions was shown to be effective in two studies.

The review also included a study which compared a skills focus and weight focus intervention. In the skills focus intervention, participants were trained in dietary and exercise behaviours compatible with maintaining weight loss. The emphasis in the weight focus condition was to discuss weight loss maintenance progress and problems, and address any difficulties using a non-specific problem solving strategy. Although differences between the two groups were not statistically significant, the percentage of participants maintaining initial weight loss for one year was greatest in the weight focus group compared to the skills focus and control condition. The reviewers concluded that problem solving approaches (e.g. weight focus) was a promising strategy.

Perri and Corsica (2002) reviewed studies of extended contact where behavioural treatment was extended beyond 6 months through the use of weekly or biweekly sessions and other maintenance strategies implemented or continued after initial behavioural treatment, published during the period 1987-1999. The reviewers found that patients who received long-term treatment, which averaged 41 sessions over 54 weeks, maintained 10.3 kg of their initial 10.7 kg weight loss compared to a mean weight loss of 6.6 kg in three of the studies which included a control group. The authors concluded there was a beneficial effect for extended treatment groups. However, this was not a systematic review.

Professor Summerbell, author of two Cochrane systematic reviews, one concerning interventions for treating obesity in children (2004) and interventions for preventing obesity in children (2005), was contacted for her advice on whether a review on psychological interventions for obesity would be beneficial. Professor Summerbell did not know of an existing review that covered this area and thought such a review would be a valuable addition.

### **Aims and Objectives**

The principal aim of this systematic review is to assess the effects of psychological interventions designed to maintain weight loss in obese or overweight adults.

The specific objective is to evaluate any psychological intervention compared with no treatment or another active intervention designed to help overweight or obese adults maintain weight loss after they have undergone an initial

intervention, as assessed by a measure of weight change, BMI or other assessment of obesity.

The question of this review is: Are psychological interventions for the maintenance of weight loss more effective than other active interventions or no treatment?

## **METHOD**

### **Criteria for Considering Studies for this Review**

#### **Types of studies**

All randomised controlled trials of psychological interventions for maintenance of weight loss in overweight or obese adults were considered for inclusion. Trials had to have a minimum follow-up of 12 months after completion of initial weight loss treatment. This time frame was considered to be the minimum because of the focus of the review on *maintaining* weight loss, therefore long-term assessments were considered essential.

#### **Types of participants**

Studies were limited to adult participants (aged over 18 years) who were overweight or obese at study baseline according to any parameter (e.g., weight, BMI, percentage overweight).<sup>1</sup> Studies examining participants with eating disorders such as bulimia nervosa, binge eating disorder etc. were excluded.

#### **Types of intervention**

##### *Interventions included*

Psychological interventions that are designed to *maintain* weight loss were examined. All types of psychological interventions were considered for inclusion. Studies were included which compared psychological interventions to a control group that had received no treatment or another active intervention.

##### *Interventions excluded*

Interventions were excluded if their focus was predominantly spouse or family support<sup>2</sup>; exercise or diet<sup>3</sup> or monetary incentives. Studies which combined a pharmacological intervention with a psychological intervention were also excluded. Alternative therapies were not considered in this review.

#### **Types of outcome measures**

To be included studies had to report weight or another measure of obesity (e.g., BMI, waist measurement, waist-to-hip ratio).

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<sup>1</sup> This is consistent with the recent Cochrane review 'Psychological Interventions for overweight or obesity' (Shaw et al., 2005).

<sup>2</sup> Family support has been reviewed elsewhere see McLean, Griffin, Toney et al. (2003).

<sup>3</sup> There is a review of long-term weight loss after diet and exercise see Curioni and Lourenco (2005).

### **Search Strategy for Identification of Studies**

1. The following electronic databases were searched from January 1996 to February 2006:  
Medline, Embase, PsychInfo, Social Science Citation Index and The Cochrane Central Register of Controlled Trials (CENTRAL).
2. Databases of ongoing and existing trials and systematic reviews were searched including The National Research Register (<http://www.nrr.nhs.uk/>), Health Technology Assessment (<http://www.hta.nhsweb.nhs.uk/index.htm>), the Cochrane Database of Systematic Reviews and the *metaRegister* of Controlled Trials (<http://www.controlled-trials.com/mrct/>). The *mRCT* is a major international searchable database of ongoing randomised controlled trials in all areas of healthcare. The following registers were included: ISRCTN register, Medical Research Council, NHS Trusts Clinical Trials Register, National Health Service Research and Development Programme 'Time-Limited' National Programmes, National Health Service Research and Development Regional Programmes and National Institutes of Health (NIH) - randomized trial records held on NIH *ClinicalTrials.gov* website.
3. The reference lists of relevant systematic reviews located from the searches and primary studies were checked to find other potentially eligible studies.
4. Key authors were contacted in order to acquire any recent and unpublished studies, however there was no response.

The following search was carried out in PsychInfo and adapted for Medline, Embase, Social Science Citation Index and CENTRAL. PsychInfo, Medline, Embase searches were carried out via Dialog DataStar, the Social Science Citation Index via Web of Knowledge and CENTRAL via The Cochrane Library.

#### **PsychInfo** (through Dialog DataStar)

Searched 11<sup>th</sup> February, 2006

Years 1996-2006

1. Obese
2. Obesity
3. Overweight
4. Over adj weight

5. (1 OR 2 OR 3 OR 4) [in abstract or title]
6. exp OBESITY [Thesaurus term]
7. 5 or 6
8. Weight with control
9. Weight with management
10. Weight with maintenance
11. (8 OR 9 OR 10) [in abstract or title]
12. exp WEIGHT-CONTROL [Thesaurus term]
13. 11 or 12
14. psychotherapy or counselling or relapse adj prevention or behavior\$4 adj modification or behavior\$4 adj therapy or behavior\$4 adj treatment or cognitive adj therapy or cognitive adj behavior\$4 adj therapy or interpersonal adj therapy or aversion adj therapy or nondirective adj therapy or non adj directive adj therapy or problem adj solving adj therapy or (problemsolving adj therapy) [in abstract or title]
15. person adj center\$4 adj therapy or relaxation adj training or relaxation adj therapy or motivational adj interviewing or social adj support or hypnotherapy or hypnosis or imagery adj therapy or guided adj imagery or systematic adj desensitisation or covert adj sensitisation or contingency adj contracting or counter adj conditioning or reinforcement or shaping or extinction or (supportive adj therapy) [in abstract or title]
16. (14 or 15) [in abstract or title]
17. exp PSYCHOTHERAPY [Thesaurus term]
18. exp BEHAVIOR-MODIFICATION [Thesaurus term]
19. exp COGNITIVE-TECHNIQUES [Thesaurus term]
20. exp MILIEU-THERAPY [Thesaurus term]
21. exp MOVEMENT-THERAPY [Thesaurus term]
22. exp MULTIMODAL-TREATMENT-APPROACH [Thesaurus term]
23. exp ONLINE-THERAPY [Thesaurus term]
24. exp PSYCHOTHERAPEUTIC-TECHNIQUES [Thesaurus term]
25. exp RELAXATION-THERAPY [Thesaurus term]
26. 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25
27. RANDOM\$4 [in abstract or title]
28. (SINGLE OR DOUBLE OR TREBLE OR TRIPLE).TI,AB. NEAR (MASK OR BLIND).TI,AB.
29. CLINICAL-TRIALS [Thesaurus term]
30. 27 or 28 or 29

31. 7 and 13 and 26 and 30
32. PO=HUMAN
33. AGE=ADULTHOOD-18-YRS-AND-OLDER OR AGE=YOUNG-ADULTHOOD-18-29-YRS\$ OR AGE=THIRTIES-30-39-YRS OR AGE=MIDDLE-AGE-40-64-YRS OR AGE=AGED-65-YRS-AND-OLDER OR AGE=VERY-OLD-85-YRS-AND-OLDER
34. PT=JOURNAL OR PT=PEER-REVIEWED-JOURNAL OR PT=NON-PEER-REVIEWED-JOURNAL OR PT=PEER-REVIEWED-STATUS-UNKNOWN
35. AT=EMPIRICAL\$ OR AT=EXPERIMENTAL\$ OR AT=FOLLOWUP\$ OR AT=LONGITUDINAL\$ OR AT=PROSPECTIVE\$ OR AT=RETROSPECTIVE\$ OR AT=EXPERIMENTAL-REPLICATION OR AT=FOLLOWUP-STUDY OR AT=LONGITUDINAL\$ OR AT=PROSPECTIVE\$ OR AT=RETROSPECTIVE\$ OR AT=PROSPECTIVE-STUDY OR AT=RETROSPECTIVE-STUDY OR AT=TREATMENT\$
36. AT=ORIGINAL-JOURNAL-ARTICLE
37. 34 or 35 or 36
38. YEAR=2006 OR YEAR=2005 OR YEAR=2004 OR YEAR=2003 OR YEAR=2002 OR YEAR=2001 OR YEAR=2000 OR YEAR=1999 OR YEAR=1998 OR YEAR=1997 OR YEAR=1996
39. 31 and 32 and 33 and 37 and 38

The metaRegister of Controlled Trials database is far simpler than the other databases utilised, so it was not possible to conduct as sophisticated a search strategy.<sup>4</sup> In light of this, the following terms were employed: 'weight control' or 'weight management' or 'weight maintenance'.

### **Management of hits**

The hits identified from the searches of three electronic databases [PsychInfo 64, Medline 125 and Embase 54] were combined and using the 'remove duplicates function', 67 duplicates were removed leaving a total of 176 abstracts. The social science citation index retrieved 97 abstracts. The CENTRAL database revealed 282 abstracts. The metaRegister of Controlled

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<sup>4</sup> For example, there is not an explode function and you cannot combine searches.

Trials database revealed a total of 130 abstracts. Therefore a total of 685 abstracts were retrieved for review.

## **Methods of the review**

### **Selection of studies**

The author carried out the literature search and checked the abstracts for potential studies. Another researcher (DL) also assessed the abstracts to determine whether the full paper was needed for further investigation in order to minimize bias. Full articles were retrieved for further assessment if the information given suggested:

1. Participants were adults who were obese or overweight and had been on a weight reduction programme;
2. Compared a psychological weight loss maintenance intervention with control or comparison intervention;
3. Measured weight change and
4. Randomly allocated participants to conditions.

When a title/abstract could not be rejected with certainty, the full text of the article was obtained for further evaluation.

Full-text copies of 24 papers were assessed independently against the inclusion criteria using the Trial Eligibility Form (see appendix D1) by two researchers (AR & DL). Disagreements were resolved by a third party (DM). After discussion, it was agreed that 6 papers warranted inclusion in the review. A list of the characteristics of the excluded studies can be seen in Appendix D2.

### **Methodological quality**

The Cochrane Reviewers' Handbook states that "authors should avoid the use of 'quality scores' and undue reliance on detailed quality assessments. It is not supported by empirical evidence, it can be time-consuming, and it is potentially misleading" (Higgins, 2005 (p.87)). As a result, quality scores will not be calculated. However indicators of quality will be recorded to provide the reader with an indication of their methodological characteristics.

The following factors were recorded:

- Random allocation – does the study describe how participants were randomised?
- Blinding – were participants, providers and outcome assessors blind to the intervention?



- Attrition rate – what was the attrition rate for the study?; did the attrition rate vary between conditions?; did the study include intention to treat (ITT) analysis?
- Sufficient sample – did the study include a power calculation?

These factors for each study are presented in Table D1.

**Table D1. Main characteristics of the six included studies in the systematic review**

| Study ID = 1   | Methods   | Participants  | Interventions  |
|--|---|---|--|
| <p><b>Authors:</b><br/><b>Leermakers et al. (1999)</b></p> <p><b>Aim:</b> Compare an exercise-focused maintenance programme with a weight-focused maintenance programme</p> <p><b>Initial Treatment:</b><br/>26 weeks behavioural treatment</p> <p><b>Length of maintenance:</b> 6 months</p> <p><b>Follow-up:</b> 12 months</p> | <p><b>Randomisation:</b><br/>Method not described</p> <p><b>Blinding:</b><br/>Clients: Unknown<br/>Providers: Unknown<br/>Outcome Assessors: Unknown</p> <p><b>Intention to treat:</b><br/>Yes</p> <p><b>Power calculation:</b><br/>Not discussed</p> | <p><b>Location:</b> USA</p> <p><b>Weight entry criteria:</b><br/>20-100% over ideal body weight at baseline (measure not stated)</p> <p><b>Inclusion Criteria:</b><br/>None described</p> <p><b>Exclusion Criteria:</b><br/>None described</p> <p><b>Number beginning maintenance phase:</b><br/>67</p> <p><b>Gender:</b> 80% female</p> <p><b>Age:</b> 50.8 (SD 11.1)</p> <p><b>Ethnicity:</b> 94% Caucasian</p> <p><b>Weight (kg) at baseline:</b> 94</p> <p><b>BMI:</b> Not stated</p> <p><b>Recruitment method:</b><br/>advertisement and physician referrals</p> | <p><b>Professional delivering the intervention:</b><br/>Clinical psychology graduate students</p> <p><b>Duration of Intervention:</b><br/>Initial treatment: 26 week behavioural group weight-loss programme<br/>Maintenance: 13 biweekly maintenance sessions over 26 weeks</p> <p><b>Description of Intervention:</b><br/><b>Initial treatment</b><br/>Participants were randomised to two groups:<br/>1) Behavioural treatment (training in self-monitoring, goal setting, stimulus control and cognitive restructuring). Participants were asked to adhere to an average caloric intake of 1,200 kcal/day (women) or 1,500 kcal/day (men) and to limit fat intake to 30% of total kcal per day. Participants gradually worked toward an exercise goal of walking 30 minutes per day, 6 days per week.<br/>2) Behavioural treatment plus personalised skill acquisition (similar to above but participants reinforced based on the mastery of behavioural skills). The ultimate goals for caloric consumption, fat intake and exercise were the same as in group 1, but individuals worked toward them in increments defined by mastery criteria.<br/>There was no significant difference in the weight loss between these two groups and participants were randomised to the maintenance interventions.<sup>5</sup></p> <p><b>Maintenance programmes</b><br/>Both groups expected to complete written diaries of food intake and physical activity during the maintenance period. Participants received \$1 for session attendance and \$1 for completion of written self-monitoring. Participants were asked to maintain caloric intake of 1,200 kcal/day (women) or 1,500 kcal/day (men) and walk 30 minutes per day, 5 days per week.<br/>a) Exercise-focused maintenance programme. Comprised biweekly supervised group exercise sessions; individual monetary contingencies</p> |

<sup>5</sup> Information has been extracted from their earlier paper which describes the findings of the initial treatment (Fuller, Perri, Leermakers et al., 1998).

|  |  |  |  |
|--|--|--|--|
|  |  |  | <p>for meeting exercise goals; inter-group competitions and prizes and comprehensive training in relapse prevention targeted at avoiding or coping with lapses in exercise (n randomised = 38; n completed = 28; attrition = 18%).</p> <p>b) Weight-focused maintenance condition. Therapist led group discussions on maintenance of weight loss. Participants were responsible for determining the issues. Therapists led problem-solving of weight-related difficulties. Emphasis was on coping with any factors that represented an obstacle to maintaining weight loss. Individuals did not receive formal training in problem solving or relapse prevention, did not engage in supervised exercise and did not participate in programme of incentives for exercise completion (n randomised = 29; n completed = 20; attrition = 10%).</p> <p><b>Attrition:</b> 28% at 18 month follow-up.</p> |
|--|--|--|--|

| Study ID = 2  | Methods  | Participants   | Interventions   |
|---|--|--|---|
| <p><b>Authors:</b><br/>Harvey-Berino et al. (2004)</p> <p><b>Aim:</b> Compare three 12-month weight maintenance programmes; 1) frequent in-person support (F-IPS), 2) internet support (IS) and 3) minimal in-person support (M-IPS).</p> <p><b>Initial Treatment:</b><br/>24 weeks behavioural treatment</p> <p><b>Length of maintenance:</b><br/>12 months</p> <p><b>Follow-up:</b> 12 months</p> | <p><b>Randomisation:</b><br/>Method not described.</p> <p><b>Blinding:</b><br/>Clients: Unknown<br/>Providers: Unknown<br/>Outcome Assessors: Yes</p> <p><b>Intention to treat:</b><br/>Yes</p> <p><b>Power calculation:</b><br/>Yes</p> | <p><b>Location:</b> USA</p> <p><b>Weight entry criteria:</b><br/>BMI <math>\geq 25</math> kg/m<sup>2</sup></p> <p><b>Inclusion Criteria:</b><br/>Age over 18, necessary computer hardware to receive intervention.</p> <p><b>Exclusion Criteria:</b><br/>History of major medical or psychiatric problems, planned pregnancy within next 18 months, unable to participate in an exercise programme</p> <p><b>Number beginning maintenance phase:</b><br/>232</p> <p><b>Gender:</b> 82% female</p> <p><b>Age:</b> 46</p> <p><b>Ethnicity:</b> 100% White</p> <p><b>Weight (kg) at baseline:</b> 89.4 (SD 15.2)</p> <p><b>BMI:</b> 31.8 kg/m<sup>2</sup> (SD = 4.1)</p> <p><b>Recruitment method:</b><br/>Newspaper advertisements</p> | <p><b>Professional delivering the intervention:</b><br/>Master's level dietician trained in behavioural weight control techniques.</p> <p><b>Duration of Intervention:</b><br/>Initial treatment: 24 week behavioural group weight-loss programme<br/>Maintenance: biweekly maintenance sessions over one year following initial treatment</p> <p><b>Description of Intervention:</b></p> <p><b>Initial treatment</b><br/>The intervention was conducted using interactive television (ITV). There were 10 ITV sites. The ITV site closest to the university was used to broadcast the ITV sessions for all meetings. The participants could see and hear the therapist at all times and each participant could be heard and seen by others when they were speaking.<br/>The intervention focused on the modification of eating and exercise habits through the use of behavioural strategies and self-management skills. Participants met weekly for 1 hour. Participants were instructed to reduce their caloric intake (the amount depended on their baseline body weight). Graded goals for programmed activity were used. Patients were encouraged to expend at least 1000 calories/wk in physical activity.</p> <p><b>Maintenance programmes</b><br/>During the 12 months of maintenance participants were told to continue with their diet and exercise prescriptions.<br/>There were three maintenance conditions: 1) F-IPS (Frequent in-person support); 2) IS (Internet support) and 3) M-IPS (Minimal in-person support). F-IPS and IS group sessions differed only in the method of delivery. Both are based on the multi-component weight maintenance programmes of Perri, McAllister, Gange et al., (1988).</p> <p>a) F-IPS. Participants met 'in person' at their local ITV studio on a bi-weekly basis for 52 weeks. Participants gave in their self-monitoring diaries and were weighed. Discussions were facilitated by the group therapist and focused on problem-solving difficult eating and exercise situations. On weeks when the group did not meet, participants received a phone call from the therapist. They also participated in a</p> |

|  |  |  |  |
|--|--|--|--|
|  |  |  | <p>social-influence peer-support programme where they had the opportunity to earn points for adhering to the following programme goals, such as staying within their calorie goal, meeting or exceeding their exercise goal and initiating contact with group members. Points were converted into lottery tickets (n randomised = 77; n completed = 61; attrition = 21%)</p> <p>b) IS. All participants attended an initial session where they were taught the necessary procedures for the intervention, e.g., logging on, electronic self-monitoring forms. Participants attended bi-weekly maintenance sessions in the form of an internet chat session, facilitated by the group therapist. During the week the group was not meeting, participants received an email from the therapist and had the opportunity to enter their weekly self-monitoring data on the web page form. As with the F-IPS group, they had the opportunity to earn points for lottery tickets. Participants could contact each other by email, using a bulletin board or making appointments to chat in the chat room (n randomised = 77; n completed = 52; attrition = 33%)</p> <p>c) M-IPS. Participants randomised to this group continued to meet in-person over ITV, monthly, for the first 6 months of the 12-month weight maintenance condition. Participants had their weight measured and attended an hour-long weight maintenance support group. They were encouraged to continue self-monitoring, although their diaries were not reviewed by the therapists. Participants were not contacted between the monthly meetings and there was no contact from months 7 to 12 (n randomised = 78; n completed = 63; attrition = 20%)</p> <p><b>Attrition:</b> 31% at 18 month follow-up.</p> |
|--|--|--|--|

| Study ID = 3   | Methods   | Participants   | Interventions  |
|--|---|--|--|
| <p><b>Authors:</b><br/>Kumanyika et al. (2005)</p> <p><b>Aim:</b> To see whether further counselling in the form of group support or self-help would be effective compared to usual care for long-term weight management</p> <p><b>Initial Treatment:</b><br/>10 weeks exercise, physical activity and behavioural counselling</p> <p><b>Length of maintenance:</b><br/>18 months</p> <p><b>Follow-up:</b><br/>18 months</p> | <p><b>Randomisation:</b><br/>Yes (via a permuted block randomisation scheme in a 1:1:1 ratio. Sealed envelopes prepared and monitored by study statistician).</p> <p><b>Blinding:</b><br/>Clients: Unknown<br/>Providers: Unknown<br/>Outcome Assessors: No</p> <p><b>Intention to treat:</b><br/>No</p> <p><b>Power calculation:</b><br/>Yes</p> | <p><b>Location:</b> USA</p> <p><b>Weight entry criteria:</b><br/>BMI = 30 - 50 kg/m<sup>2</sup></p> <p><b>Inclusion Criteria:</b><br/>Self-identification as African-American; 25 – 70 years</p> <p><b>Exclusion Criteria:</b><br/>Conditions where weight reduction would be contraindicated, e.g. pregnancy, treatment for psychiatric disorders</p> <p><b>Number beginning maintenance phase:</b><br/>128</p> <p><b>Gender:</b> 89.9% female</p> <p><b>Age:</b> 43.4 (SD 10.5)</p> <p><b>Ethnicity:</b> 100% African American</p> <p><b>Weight (kg) at baseline:</b><br/>102.7 (SD 17.2)</p> <p><b>BMI:</b> 38.0 kg/m<sup>2</sup> (SD 5.3)</p> <p><b>Recruitment Method:</b><br/>Posters, presentations to primary care staff</p> | <p><b>Professional delivering the intervention:</b><br/>Nutrition, exercise or behaviour change specialists, usually working in teams of two. Rotated through classes according to topic.</p> <p><b>Duration of Intervention:</b><br/>Initial treatment: 10 weekly group sessions (75 min per session)<br/>Maintenance:<br/>a) 6 biweekly classes, then monthly classes to the end of follow-up<br/>b) Monthly routine telephone call<br/>c) Semi-annual follow up clinic visits. Also provided to participants in a + b.</p> <p><b>Description of Intervention:</b></p> <p><b>Initial treatment</b><br/>Based on supported behavioural change approaches for adult learners. Focuses on eating behaviours and physical activity and includes behavioural counselling topics such as self-monitoring, stimulus control, goal setting and planning, overcoming motivational barriers, cognitive restructuring, assertive responding and relapse prevention and management. No specific diet or caloric intake level was specified, except that women and men were advised to consume at least 1200 and 1500 kcal, respectively, per day. Advice to increase physical activity was individually tailored to ability and preferences.</p> <p><b>Maintenance programmes</b></p> <ol style="list-style-type: none"> <li>Healthy Eating and Lifestyle Programme (HELP) classes; group counselling. The HELP classes were led by a subset of the initial instructors and included new topics, expansion on or review of prior topics, and an even greater focus on group discussion than the initial intervention. Missed classes were followed up with mailings of handouts and a make-up telephone call was attempted. Counsellors occasionally led Saturday morning walks and provided individualised nutrition, physical activity or behavioural consultations upon request, usually by telephone (n randomised = 43, n completed = 28; attrition = 35%)</li> <li>Self-HELP kit. This contained a personalised calendar, a packet describing local resources for healthy eating and physical activity, a</li> </ol> |

|  |  |  |  |
|--|--|--|--|
|  |  |  | <p>personal diary, pedometer and ad hoc telephone support from a HELP outreach worker to facilitate self-directed long-term weight management (n randomised = 43; n completed = 28; attrition = 35%)</p> <p>c) The usual care condition, 'clinic visits only' involved no further intervention outside of brief counselling at the semi-annual follow-up clinic visits and advice to seek assistance from their personal physician. Only contacts were at the semi-annual follow up clinic visits provided to all participants (n randomised = 42; n completed = 31; attrition = 26%)</p> <p><b>Attrition:</b> 32% at 18 month follow-up</p> |
|--|--|--|--|

| Study ID = 4   | Methods  | Participants  | Interventions   |
|--|--|---|---|
| <p><b>Authors:</b><br/>Perri et al. (2001)</p> <p><b>Aim:</b> Compare a relapse prevention training maintenance programme with problem-solving therapy</p> <p><b>Initial Treatment:</b><br/>20 weeks behavioural treatment</p> <p><b>Length of maintenance:</b><br/>12 months</p> <p><b>Follow-up:</b> 12 months</p> | <p><b>Randomisation:</b><br/>Method not described.</p> <p><b>Blinding:</b><br/>Clients: Unknown<br/>Providers: Unknown<br/>Outcome Assessors: Unknown</p> <p><b>Intention to treat:</b><br/>Yes</p> <p><b>Power calculation:</b><br/>Not discussed</p> | <p><b>Location:</b> USA</p> <p><b>Weight entry criteria:</b><br/>BMI = 27-40 kg/m<sup>2</sup></p> <p><b>Inclusion Criteria:</b><br/>21-60 years of age</p> <p><b>Exclusion Criteria:</b><br/>None described</p> <p><b>Number beginning maintenance phase:</b><br/>80</p> <p><b>Gender:</b> 100% female</p> <p><b>Age:</b><br/>BT = 45<br/>RPT = 49<br/>PST = 45</p> <p><b>Ethnicity:</b> Unknown</p> <p><b>Weight (kg) at baseline:</b><br/>BT = 94.67 (SD = 11.35)<br/>RPT = 96.95 (SD = 13.69)<br/>PST = 97.96 (SD = 16.01)</p> <p><b>BMI (kg/m<sup>2</sup>):</b><br/>BT = 36.37 (SD = 4.7)<br/>RPT = 35 (SD = 3.96)<br/>PST = 36.10 (SD = 4.93)</p> <p><b>Recruitment Method:</b><br/>Newspaper advertisements</p> | <p><b>Professional delivering the intervention:</b><br/>Pairs of clinical psychology graduate students</p> <p><b>Description of Intervention:</b><br/>Initial treatment: 20 week behavioural group weight-loss programme<br/>Maintenance: biweekly maintenance sessions over one year.</p> <p><b>Initial treatment</b><br/>Behavioural weight management techniques were taught in a didactic fashion (e.g., self-monitoring, goal setting, stimulus control etc.). Participants were instructed to follow a low-calorie, low-fat diet and complete a home based walking programme consisting of 30 min/day, 5 days/week.</p> <p><b>Maintenance programmes</b></p> <ol style="list-style-type: none"> <li>BT (behavioural therapy) received no additional therapy contacts but asked to return for follow-up assessments 6 and 12 months later (n randomised = 18; n completed = 15; attrition = 17%).</li> <li>RPT (relapse prevention training). Received year long programme of biweekly sessions. Group leaders conducted a psycho-educational training session based on 1 of 24 RPT modules based on the work of Marlatt and Gordon (1985). Topics included identifying high-risk of situations for slips and lapses, practising coping with high-risk situations, using problem solving techniques, training in cognitive-coping strategies and planning for long-term prevention and a balanced lifestyle (n randomised = 28; n completed = 20; attrition = 29%).</li> <li>PST (problem-solving therapy). Group members were asked to report eating or exercise related difficulties. Group leaders led the participants in group problem solving with the goal of generating a solution plan. Leaders used a model described by Perri, Nezu and Viegner (1992). Leaders did not introduce any new lessons or training techniques and group members did not receive formal instruction or handouts on the use of problem-solving techniques (n randomised = 34; n completed = 23; attrition = 32%).</li> </ol> <p><b>Attrition:</b> 27% at 17 month follow-up.</p> |



| Study ID = 5  | Methods  | Participants  | Interventions   |
|---|--|---|---|
| <p><b>Authors:</b><br/><b>Riebe et al. (2005)</b></p> <p><b>Aim:</b> Compare two maintenance interventions; 1) individualised reports based on the transtheoretical model, 2) generic, action oriented reports at 9 and 12 months</p> <p><b>Initial Treatment:</b><br/>26 weeks weight-management programme</p> <p><b>Length of maintenance:</b><br/>12 months</p> <p><b>Follow-up:</b> 18 months</p> | <p><b>Randomisation:</b><br/>Method not described.</p> <p><b>Blinding:</b><br/>Clients: Unknown<br/>Providers: Unknown<br/>Outcome Assessors: Unknown</p> <p><b>Intention to treat:</b><br/>Yes</p> <p><b>Power Calculation:</b><br/>Not discussed</p> | <p><b>Location:</b> USA</p> <p><b>Weight entry criteria:</b><br/>BMI = 27 - 40 kg/m<sup>2</sup></p> <p><b>Inclusion Criteria:</b><br/>Age over 18, clearance from GP to take part.</p> <p><b>Exclusion Criteria:</b><br/>If exercise or dietary fat reduction contraindicated for medical reasons, active cancer or type 1 diabetes, symptoms of an eating disorder or depression, significant cardiovascular disease</p> <p><b>Number beginning maintenance phase:</b><br/>144</p> <p><b>Gender:</b> 78% female</p> <p><b>Age:</b> 50.2 (SD 9.2)</p> <p><b>Ethnicity:</b> 97% Caucasian</p> <p><b>Weight (kg) at baseline:</b> 91.4 (SD 15.6)</p> <p><b>BMI:</b><br/>32.5 kg/m<sup>2</sup> (SD 3.9)</p> <p><b>Recruitment Method:</b><br/>Not stated</p> | <p><b>Professional delivering the intervention:</b><br/>The behavioural component was delivered by clinical psychology graduate students. A registered dietician provided group diet instruction.</p> <p><b>Duration of Intervention:</b><br/>Initial treatment: 26 week group weight-management programme<br/>Maintenance: Two computer generated reports over one year following initial treatment</p> <p><b>Description of Intervention:</b><br/><b>Initial treatment</b><br/>For first 3 months, participants met twice a week for two 2 hour sessions with 1 hour of behavioural or dietary instruction and 1 hour of exercise. This was followed by a tapering phase where participants met for 8 visits over 3 months. Treatment consisted of three key components: exercise, nutrition education and behavioural counselling. Supervised exercise sessions involved aerobic exercise conducted during the first 12 weeks of the programme. Participants were instructed to exercise at least 2 additional days per week. Dietary intervention focused on healthy eating. Participants were encouraged to set fat gram goals and monitor fat intake.<br/>The behavioural component was based on the Transtheoretical Model (TTM). Classes included identifying high-risk situations, using rewards, seeking social support, managing temptations and modifying the environment. Motivational and behavioural principles to modify eating patterns, initiate and/or continue moderate exercise and to increase the activities of daily living were introduced. Stage-specific strategies were presented in a progressive fashion.</p> <p><b>Maintenance programmes</b></p> <ol style="list-style-type: none"> <li>One group received two additional computer-generated, individualised TTM reports, via mail, at 9 and 12 months. Reports provided feedback on decisional balance, confidence, and use of processes of change. Feedback compared an individual's scores on these variables to stage-matched norms and to individual's previous scores.</li> <li>The comparison group received generic, action-oriented information about diet and exercise at the same two time points.</li> </ol> <p><b>Attrition:</b> 27.8% at 24 months follow-up (not reported for each condition).</p> |

| Study ID = 6  | Methods   | Participants  | Interventions   |
|---|---|---|---|
| <p><b>Authors:</b><br/><b>Wing et al. (1996)</b></p> <p><b>Aim:</b> To see whether frequent telephone contact would enable patients to maintain their weight loss</p> <p><b>Initial Treatment:</b><br/>26 week behavioural weight control programme</p> <p><b>Length of maintenance:</b><br/>12 months</p> <p><b>Follow-up:</b> 12 months</p> | <p><b>Randomisation:</b><br/>Method not described.</p> <p><b>Blinding:</b><br/>Clients: Unknown<br/>Providers: Unknown<br/>Outcome Assessors: Unknown</p> <p><b>Intention to treat:</b><br/>No</p> <p><b>Power Calculation:</b><br/>Not discussed</p> | <p><b>Location:</b> USA</p> <p><b>Weight entry criteria:</b><br/>30 – 70 lb overweight based on Metropolitan Life Insurance norms</p> <p><b>Inclusion Criteria:</b><br/>Aged 15 – 55.</p> <p><b>Exclusion Criteria:</b><br/>Pregnancy, illnesses that would prevent participation in diet/exercise programme.</p> <p><b>Number beginning maintenance phase:</b><br/>53</p> <p><b>Gender:</b> 100% female</p> <p><b>Age:</b> Phone contact = 43.6 (SD 1.5); control = 42.6 (SD 1.4)</p> <p><b>Ethnicity:</b> Unknown</p> <p><b>Weight (kg) at baseline:</b> Unknown</p> <p><b>BMI (kg/m<sup>2</sup>):</b><br/>Phone contact = 32.3 (SD 0.4)<br/>Control = 32.1 (SD 0.4)</p> <p><b>Recruitment Method:</b><br/>Newspaper advertisements</p> | <p><b>Professional delivering the intervention:</b><br/>Unknown. "Interviewers were employed and trained by a data centre and followed a specific protocol in calling individuals to retrieve data for the study" (p173).</p> <p><b>Duration of Intervention:</b><br/>Initial treatment: 26 week behavioural group weight-loss programme<br/>Maintenance: Weekly telephone calls for 12 months.</p> <p><b>Description of Intervention:</b></p> <p><b>Initial treatment</b><br/>Participants were randomised to four groups:</p> <ol style="list-style-type: none"> <li>1) Standard behaviour treatment (SBT);</li> <li>2) SBT plus meal plans indicating exactly what should be eaten for 5 breakfasts and dinners each week;</li> <li>3) SBT plus the provision of actual food for five breakfasts and dinners, with the cost of the food shared between patients and the programme;</li> <li>4) SBT plus free food provision.</li> </ol> <p>Weight losses at the end of the six-month programme averaged 8.0 kg in the SBT condition and 11.4-12.0 kg in the other three conditions.<sup>6</sup></p> <p><b>Maintenance programmes</b></p> <ol style="list-style-type: none"> <li>a) Phone Maintenance. The intervention group received a telephone call every week for one year. Interviewers asked participants if they had weighed themselves in the last week and if they had kept an eating and exercise diary. If they had kept a diary, they were asked to report amounts of exercise, energy intake, and fat intake for the week. Up to ten callbacks were made to contact the individual. Phone contacts did not include counselling content.</li> <li>b) There was a no-contact control group.</li> </ol> <p><b>Attrition:</b><br/>12% at 12 month follow-up for the phone maintenance condition. All participants were retained in the control condition.</p> |

<sup>6</sup> This information has been extracted from their earlier paper which describes the findings of the initial treatment (Wing, Jeffery, Hellerstedt et al, 1996).

**Table D2. Summary of Results**

| Study ID | Authors                     | Initial treatment & length (wks) | N  | Pre-treatment weight (kg) | Mean initial weight loss (kg) | Maintenance intervention and frequency of intervention | Length of maintenance (wk) | Net loss after maintenance (kg) | % initial loss maintained | Additional F/u (wk) | Net loss at f/u (kg) | % loss maintained by f/u | Attrition (%) |
|----------|-----------------------------|----------------------------------|----|---------------------------|-------------------------------|--|----------------------------|---------------------------------|---------------------------|---------------------|----------------------|--------------------------|---------------|
| 1        | Leermakers et al. (1999)    | B (26)                           | 28 | 94                        | 9.6                           | EF (13bw)  | 26                         | 7.9                             | 82%                       | 26                  | <b>5.2a</b>          | 54%                      | 18%           |
|          |                             | B (26)                           | 20 | 94                        | 8.7                           | WF (13bw)  | 26                         | 8.5                             | 98%                       | 26                  | <b>7.9b</b>          | 91%                      | 10%           |
| 2        | Harvey-Berino et al. (2004) | B (26)                           | 52 | 91.1                      | 8.4                           | IS (26bw)  | 52                         | 7.6                             | 90%                       | -                   | -                    | -                        | 33%           |
|          |                             | B (26)                           | 63 | 88.1                      | 7.6                           | M-IPS *  | 52                         | 5.1                             | 67%                       | -                   | -                    | -                        | 20%           |
|          |                             | B (26)                           | 61 | 88.8                      | 7.6                           | FIPS (26bw)  | 52                         | 5.5                             | 72%                       | -                   | -                    | -                        | 21%           |
| 3        | Kumanyika et al. (2005)     | ENB (10)                         | 31 | 100.9                     | 1.4                           | None   | 78                         | 0.04                            | 3%                        | -                   | -                    | -                        | 26%           |
|          |                             | ENB (10)                         | 28 | 104.1                     | 0.8                           | HELP **  | 78                         | 0.02                            | 3%                        | -                   | -                    | -                        | 35%           |
|          |                             | ENB (10)                         | 28 | 100.9                     | 2.4                           | SELF-HELP  | 78                         | 1.1                             | 46%                       | -                   | -                    | -                        | 35%           |
| 4        | Perri et al. (2001)         | B (20)                           | 15 | 94.7                      | 9.5                           | None   | 52                         | <b>4.1a</b>                     | 43%                       | -                   | -                    | -                        | 17%           |
|          |                             | B (20)                           | 20 | 97                        | 8.4                           | RPT(26bw)  | 52                         | 5.9                             | 70%                       | -                   | -                    | -                        | 29%           |
|          |                             | B (20)                           | 23 | 98                        | 9.3                           | PST (26bw)   | 52                         | <b>10.8b</b>                    | 116%                      | -                   | -                    | -                        | 34%           |
| 5        | Riebe et al. (2005)         | ECNB (26)                        | 48 | 93.3                      | 5.7                           | ITTM ***   | 52                         | 3.8                             | 67%                       | 26                  | 2.8                  | 49%                      | # 28%         |
|          |                             | ECNB (26)                        | 50 | 89.6                      | 5.5                           | GAI ***  | 52                         | 3.1                             | 56%                       | 26                  | 2.7                  | 49%                      |               |
| 6        | Wing et al. (1996)          | B (26)                           | 27 | -                         | 14.2                          | None   | 52                         | 8.6                             | 60.6%                     | -                   | -                    | -                        | 0%            |
|          |                             | B (26)                           | 26 | -                         | 12.8                          | Phone (1wk)  | 52                         | 9.3                             | 72.7%                     | -                   | -                    | -                        | 12%           |

**Notes:**

N = number of participants who completed the maintenance intervention, bw = biweekly, mth = month, f/u = follow-up, a, b = different subscripts denote significant between-group differences ( $p < .05$ ), # = overall attrition rate for all conditions as attrition rate for each condition not provided

B - behaviour therapy; EF - exercise focused; ECNB - exercise classes, nutrition education and behavioural counselling; ENB - exercise, nutrition education and behavioural counselling; F-IPS - frequent in-person support; GAI - Generic, action-oriented information; IS - internet support; ITTM - Individualised Transtheoretical Model reports; M-IPS - Minimal in-person support; PST - problem-solving therapy; RPT - relapse prevention training; SELF HELP – self-help kit; TC – therapist contact; WF - weight focused

\* = the M-IPS group met once a month for 6 months. There was no contact from months 7 to 12.

\*\* = the HELP group met biweekly for the first 6 sessions and then monthly over the following 18 months.

\*\*\* = These two groups did not attend any further sessions, but received written reports at 9 and 12 months

The format for the presentation of data in this table has been adapted from Perri and Corsica (2002).

## **RESULTS**

The search strategy and subsequent selection of studies process identified 6 studies that met the inclusion criteria. Table D1 shows a summary of the main characteristics of each study included in the review. Table D2 shows the results of these studies.

The 'Results' and 'Discussion' sections may refer to the studies by their Study ID number (outlined in Table D1), as follows:

Study ID 1 = Leermakers, Perri, Shigaki et al. (1999)

Study ID 2 = Harvey-Berino, Pintauro, Buzzell et al. (2004)

Study ID 3 = Kumanyika, Shults, Fassbender et al. (2005)

Study ID 4 = Perri, Nezu, McKelvey et al. (2001)

Study ID 5 = Riebe, Blissmer, Greene et al. (2005)

Study ID 6 = Wing, Jeffery, Hellerstedt et al. (1996)

### **Summary of studies**

All studies administered treatment to groups of participants in the form of an initial weight loss treatment followed by a comparison of two (1, 5, 6) or three (2, 3, 4) maintenance conditions. Overall two studies (1, 4) found a significant difference at follow-up between the maintenance conditions. These studies have in common the utilisation of therapist led group problem solving in the intervention group.

A narrative description of each study and methodological critique is presented below. For details of the initial and maintenance interventions please see Table D1.

### **Study ID 1; Leermakers et al., (1999)**

This RCT compared a weight-focused maintenance condition with an exercise-focused maintenance condition, following a behavioural weight loss intervention which produced a mean weight loss of 8.8 kg. Participants were 67 obese adults, mean weight of 94 kg (prior to the initial intervention), 80% female and 94% Caucasian.

There were two maintenance conditions; an exercise focused and a weight focused condition. Both maintenance interventions comprised 6 months of biweekly group sessions. At the 18 month follow-up, participants in the weight-focused maintenance condition lost significantly more than the exercise-focused maintenance condition (5.2kg v's 7.9kg;  $p < 0.01$ ). Participants in the weight-focused condition maintained an average of 91% of their initial weight loss,

compared to 54% of the exercise-focused condition. There were no significant differences between the conditions in exercise participation or energy expenditure, however the weight-focused maintenance condition produced significantly greater reductions in fat consumption and significantly better maintenance of weight losses than participants in the exercise-focused programme.

The authors suggest one possible explanation for the results is that because the exercise condition focused so intensively on physical activity, very little time was devoted “to salient issues related to controlling caloric intake and dietary composition” (225). To support this they found that weight-focused participants consumed significantly fewer calories from fats at month 18 than the exercise-focused participants.

Also, the authors suggest that the exercise condition may have been too structured and unresponsive to the needs of the participants. In contrast, the weight-focused condition encouraged participants to take responsibility for the meetings. In addition, the authors discuss recent research which indicates home-based exercise may be more effective than supervised sessions which may not provide clients with the transfer of learning needed for long-term exercise adherence (Jeffery and Wing, 1997; Perri, Martin, Leermakers et al., 1997).

### **Methodological Critique**

This appears to be a well-conducted study. The data is based on the 72% of clients who completed the 18 month follow-up, however the authors carried out an ITT analysis, assuming the dropouts had returned to their baseline weights. They found there was still a significant difference between conditions, i.e., the weight-focused condition regained significantly less weight than the exercise-focused condition.

### **Study ID 2; Harvey-Berino et al. (2004)**

This study examined three different weight loss maintenance interventions. Two hundred and fifty adults between the ages of 20 and 78 years, mean weight of 89.4 kg and BMI of 31.8 began the initial 6-month behavioural weight loss intervention. This study is slightly different to the other studies described in the review as the intervention was conducted using interactive television (ITV). All participants were seen for assessment measures at baseline and at 6, 12 and 18 months.

After the initial weight loss intervention, all groups lost statistically significant amounts of weight, an average of 7.8 kg. Participants were then randomised to one of three 12 month maintenance conditions; frequent in-person support (F-IPS), internet support (IS) or minimal in-person support (M-IPS). The IS group sustained a larger weight loss by 18 months than both of the other interventions (7.6 kg, 5.1 kg and 5.5 kg for the IS, F-IPS and M-IPS groups respectively), but this difference was not statistically significant. There were no weight loss differences between the F-IPS and M-IPS conditions. This finding is contrary to the majority of the literature which suggests extended contact is beneficial at helping maintain weight loss (Corsica and Perri, 2002).

Although not statistically significant, the results suggest the internet can be an effective intervention for long-term clinical weight loss. At 18 months, 62% of the internet group participants had sustained a weight loss of at least 5%.

### **Methodological Critique**

Although the findings indicate the internet can be effective, there was higher attrition rate in the IS group (33%, 21% and 20% for the IS, F-IPS and M-IPS respectively). Participants in the IS group who did not complete assessments were significantly less educated and lost less weight during the first 6 months of treatment ( $p < 0.05$ ). These findings imply that internet interventions are not appealing for everyone.

One limitation of this study is the characteristics of their sample. All participants were White, predominantly female (82%) and predominantly well-educated. The majority of participants “were skilled in basic computer applications and were comfortable using computers” (p.324). As stated previously, there was higher attrition in the internet group by those who were less well-educated. It is therefore unknown whether this type of intervention would be appropriate for more disadvantaged groups who are more at risk of being overweight and obese.

### **Study ID 3; Kumanyika et al. (2005)**

Kumanyika et al.’s study was the only study identified in the review which specified a focus on a particular group, in this instance African-Americans. There were 237 participants enrolling on the initial intervention, 89.9% female. One of the inclusion criteria was to self identify as African-American. The average weight at baseline was 102.7 kg and BMI 38.0.

The initial intervention was designed to facilitate modest weight loss. Those who attended a data collection visit approximately 3 months after initial enrolment

were randomised to one of two maintenance conditions. The two treatments were either to continue with HELP classes, less frequent (six biweekly classes, then monthly) group counselling or self-HELP, self-directed weight management facilitated by a HELP staff member. Participants assigned to “Self-HELP” were given a Self-HELP Kit containing health eating and physical activity resources. Participants also received ad hoc telephone support. There was also a usual care condition which involved no further intervention outside of brief counselling at the semi-annual follow-up clinic visits and advice to seek assistance from their personal physician.

Overall, participants lost a mean of 1.7 kg in the initial intervention. There were no differences between the HELP classes or self-HELP or the usual care condition during the maintenance phase. These results are difficult to explain, but the authors posit several factors which may have influenced the findings. Those who were randomised to the group maintenance condition did not stay in their original groups and thus could not take advantage of any supportive relationships which have developed. Another possible explanation is that the contact frequency of the maintenance interventions was insufficient. Neither support intervention was very intensive.

### **Methodological Critique**

The researchers report initial difficulties in implementing the self-HELP intervention, reporting that they had low response in the initial attempts to facilitation when providing ‘ad hoc’ telephone support. In an attempt to address this, the authors changed their approach to provide structured staff-initiated contacts whereby a facilitator then routinely telephoned participants on a monthly basis. This presents a methodological concern as participants the same condition received a slightly different amount of support and some treatment was carried out retrospectively.

It is worth noting that participants in this study were heavier at baseline than in the other studies in this review. Research has demonstrated that body weight is a predictor of body weight loss during a treatment trial, with heavier participants typically losing more weight (Lejeune, van Aggel-Leijessen, van Baak et al., 2003; James, Astrup, Finer et al, 2000). Interestingly however participants had lost *less* weight at the end of the initial intervention than participants in the other studies reported here. One possible explanation is that the authors stated the aim of the intervention was to “facilitate modest weight loss” (p.489). No specific diet or caloric intake level was specified, except men and women were advised to consume *at least* 1200 and 1500 kcal, respectively, per day. Another

explanation lies in the short initial treatment length which was 10 weeks. This was the shortest initial treatment time in the review, with the next shortest being 20 weeks. The majority of studies had initial interventions which lasted 26 weeks. Wadden, Butryn and Byrne (2004) have demonstrated there is a strong relationship between length of treatment and weight loss. They point out a comparison of early (i.e., 1974) and more recent (1996 to 2002) studies shows that weight loss has nearly tripled over the past 30 years as treatment duration has increased more than 3-fold. For instance, in 1974, treatment for 8.4 weeks produced a mean loss of 3.8 kg, whereas treatment from 1996 to 2002 averaged 31.6 weeks and induced a loss of 10.7 kg. Although several new components (e.g., cognitive restructuring, relapse prevention) have been added to the behavioural approach since 1974, the most parsimonious explanation for today's greater weight loss is the longer duration of treatment. The rate of weight loss has remained constant at ~0.4 to 0.5 kg/wk (Wadden and Butryn, 2003).

#### **Study ID 4; Perri et al. (2001)**

In this RCT, Perri et al. (2001) had a sample of 103 participants, who were all female. Data on ethnicity was not provided. After an initial 20 week behavioural group weight-loss programme, participants were randomised to one of three conditions. One group received no further treatment, the second group received relapse prevention training (RPT) in biweekly sessions for one year based on the work of Marlatt and Gordon (1985). The third group received problem-solving therapy (PST). In this group, members were asked to report eating or exercise related difficulties. Group leaders led the participants in group problem solving with the goal of generating a solution plan. Leaders did not introduce any new lessons or training techniques and group members did not receive formal instruction or handouts on the use of problem-solving techniques.

At the 17 month follow-up, participants in the PST condition had significantly greater weight loss than those in the RPT condition (10.82 kg v's 5.85 kg;  $p < 0.05$ ) and the BT group who had received no further treatment (10.82 kg v's 4.14 kg;  $p < 0.05$ ). A year after finishing their initial weight loss treatment, on average those who received the PST intervention, maintained their entire initial weight loss, compared with those in the BT group who regained more than half of their initial loss.

There was not a significant difference between the RPT and the BT condition suggesting extended contact alone may not be sufficient to improve long-term



weight management. The RPT and PST groups were similar in terms of attendance and attrition.

A possible explanation for the results is that in contrast to the RPT group, the PST participants did not receive any didactic presentations, instead focusing solely on therapist-led efforts to help participants as a group generate solutions to weight-related problems. The wide range of strategies presented to the RPT group means they may not have had sufficient opportunity to develop mastery of particular skills. PST participants showed better long-term adherence to the behavioural strategies taught in initial treatment than did the BT participants. Furthermore, their results showed that long-term success was partially mediated by adherence to the BT strategies.

The format of the PST sessions also created more opportunities for peers to provide emotional support and practical solutions. The benefits of social support for weight management have been shown elsewhere (Wing and Jeffery, 1999).

#### **Methodological Critique**

One methodological limitation with the study is that besides assessing “adherence to treatment strategies for changing diet and exercise behaviours with a self-report measure in which participants rated their adherence to nine key behavioural weight management strategies (e.g., self-monitoring, stimulus-control)” (p.723), they did not include other process measures so we do not know what it was about the PST intervention that made it more effective. Additionally the sample consisted solely of women so we do not know whether similar findings would be found for men and there was no data provided on the ethnicity of the sample.

The authors also completed an ITT analysis for net weight loss at final assessment, assuming no change from baseline for the non-completers. These results were similar to those shown by the completers.

#### **Study ID 5; Riebe et al. (2005)**

This study examined the potential of tailored feedback reports by mail for weight loss maintenance. There were 190 participants, 78% women and 97% Caucasian. To be eligible for the study participants were required to have a BMI between 27 and 40 kg/m<sup>2</sup>. The mean weight at baseline was 89.7 kg (SD 14.9). Participants were randomly assigned into one of two extended care intervention groups. The extended care group received two additional computer-generated, individualised reports, via mail at 9 and 12 months. The reports were based on the Transtheoretical Model (TTM) (Prochaska, DiClemente, & Norcross, 1992).

The comparison group received generic, action-oriented information about diet and exercise at the same two time points. There was no additional contact with participants during the 18-month follow-up period. Outcomes focused on weight, BMI, dietary and physical activity behaviours and TTM variables, including decisional balance and processes of change.

Overall, the initial programme was moderately successful resulting in a weight loss of 5.6 kg at 6 months. At the 2 year assessment, the extended care group were 2.8 kg lower than their initial weight and the comparison group were 2.7 kg lower. There were no significant differences in weight loss, exercise, or dietary behaviours between the two groups. The authors posit two possible explanations for these findings. Firstly, all participants received three individually stage-tailored feedback reports during the initial intervention. Research on smoking cessation demonstrated a clear benefit of two to three feedback reports, but no added benefit of more than three reports (Velicer, Prochaska, Fava et al., 1999). Thus research in smoking cessation is consistent with the findings here that additional reports during the maintenance phase had no impact on behaviour.

Secondly, another possible explanation is that the generic information sent to the comparison group was action-oriented, and at the completion of the clinical programme, most participants reported being in the action stage. Thus the generic information may have been more appropriate than originally predicted.

### **Methodological Critique**

Methodologically one strength of this study is measuring possible processes of behaviour change (i.e., TTM variables). They also did ITT for all analyses of the treatment effects.

A weakness of the study is its lack of information about the numbers in each intervention. It is not known if attrition rate varied depending on condition because the information on the number randomised to each condition was not provided.

Finally, as mentioned above the maintenance intervention was very minimal (two written reports over 12 months) and the results highlight that this intervention was insufficient to demonstrate a positive impact upon the amount of weight participants were able to maintain.

### **Study ID 6; Wing et al., (1996)**

This study compared frequent phone contact designed to promote adherence to self-monitoring with a no contact control. Participants were 53 women who had

received a six month behavioural weight loss intervention and agreed to participate in a maintenance intervention.

At the 18 month follow-up, those in the phone maintenance group gained about 25% less on average than those in the control group, although this difference was not statistically significant. Some evidence was found for the benefit of phone reminders and encouragement for eating and exercise monitoring for weight maintenance. Rates of phone call completion and of reported recordkeeping over the follow-up year were inversely related to amount of regain ( $r = -.59$  for call completion,  $r = -.55$  for number of food record days reported, and  $r = -.52$  for number of exercise days reported).

### **Methodological Critique**

As pointed out by the authors, it is possible that the sample size was too small to detect a difference. The authors calculated that the effect size for the difference between conditions was .30 and they therefore would have needed 175 participants per group to demonstrate a significant effect at  $\alpha = .05$  with 0.8 power.

## **DISCUSSION**

### **Discussion of results**

This review provides a summary of the RCT's that specifically investigate psychological weight loss maintenance interventions. Only six studies met the review criteria, demonstrating that despite the importance of the increasing prevalence of overweight and obesity from a public health perspective, there is very little research specifically focussing on psychological interventions for maintaining weight loss.

Two studies found a positive effect on maintenance of weight loss (Leermakers et al. 1999; Perri et al. 2001). These results suggest the most promising approach is therapist-led group problem-solving therapy, as the only two studies to find a statistically significant positive effect at follow-up between the maintenance conditions both included this type of intervention. It is worth noting that Perri is the second author on the Leermakers et al. paper and that the interventions appear very similar. Perri et al. (2001) found 12 months after their initial treatment those who received problem-solving therapy on average maintained their entire initial weight loss compared with a group who received no further treatment. Leermakers et al. (1999) found that participants who were in the weight focused maintenance condition, which involved therapist led group problem-solving discussions, maintained significantly more weight loss than those in an exercise-focused maintenance condition. The weight focused group maintained an average of 91% of their initial weight loss at 18 months.

### **Previous research**

The evidence in this review lends support to the summary of the NHS CRD (1997) review regarding maintenance interventions which stated, 'It is possible that problem solving approaches (e.g. weight focus) are effective, however, results in favour of this were not statistically significant' (p.100). This sentence was based on a study which compared a skills focus and weight focus interventions and found the weight focus intervention to be more successful, but results did not show a statistically significant difference. Thus taken together, both reviews suggest therapist led group problem solving is an intervention deserving of further attention.

The results of this previous review taken with the results of the current review, suggest critical factors for psychological weight loss maintenance interventions include continued therapist contact, social support and problem solving of presenting problems. However, it is difficult to draw any further or firm

conclusions about what may be the effective components of psychological interventions because studies were heterogeneous in the content of their interventions and method of delivery. This heterogeneity is discussed below.

### **Heterogeneity of Interventions**

Studies were heterogeneous in terms of their interventions, which varied in the duration, content, setting, intensity and the professional(s) delivering the intervention.

**Duration:** There were differences in the length of the initial and maintenance interventions. The majority of studies conducted the initial intervention over a six month period (1, 2, 5, 6). However in one study the initial intervention lasted for 20 weeks (4) and in another the initial intervention was considerably shorter at 10 weeks (3). The length of the maintenance interventions also varied from 26 weeks (1), 52 weeks (2, 4, 5, 6) and 78 weeks (3). These differences in length present difficulties when trying to compare the results across studies because the timing of when measurements of weight are taken are dissimilar, preventing a comparison of 'like with like'. The ability to maintain weight loss has been found to decrease over time and therefore the timing of measurements is important in any comparison.

**Content and Setting:** All studies employed behavioural therapy techniques in the initial intervention with strategies generally being identified as stimulus control, reinforcement, self-monitoring, problem solving and goal setting. In all but one of the studies, the initial interventions were delivered to groups in-person, with the exception of one (2) where the intervention was conducted in groups over inter-active television. Maintenance interventions also differed in the manner of delivery. Two were delivered in-person (1, 4), two utilised telephone contact (3, 6), two included written support (3, 5) and one utilised the internet and interactive television (2).

Three studies compared different types of maintenance intervention (1, 2, 5), whilst three studies included a no treatment control (3, 4, 6).

The maintenance interventions differed more in terms of the content although three studies (1, 2, 4) utilised therapist led group problem solving therapy in one or more arms of their interventions. A similarity between these three studies is the psychologist, Perri, who was an author of two of the studies (1, 4) and the intervention utilised in the third study was based on a previous intervention by Perri et al., (1988) which utilised a combination of group problem solving and a social influence peer support programme (2).

**Intervention provider:** The professional background of the provider of the intervention also differed. They included clinical psychology graduate students (1, 4, 5) and a master's level dietician trained in behavioural weight control techniques (2). In two of the studies there was more than one professional delivering the intervention; one included nutrition, exercise or behaviour change specialists (3) and another included clinical psychology graduate students and a registered dietician (5). One study (6) used phone interviewers whose background was not stated.

**Intensity:** As with the content of interventions, the intensity of the *initial* interventions was similar, with participants typically meeting for one hour on a weekly basis. However the maintenance interventions varied more in terms of intensity. Arguably the least intense intervention involved two written reports to participants (Riebe et al., 2005) at 9 and 12 months, with no other support. The most intense interventions were those by Perri et al., (2001) and Harvey-Berino et al., (2004) where participants met biweekly for 12 months.

### **Participant characteristics**

Data concerning the ethnicity and gender of participants can be seen in Table D1. All studies provided this information, apart from Perri et al., (2001) and Wing et al. (1996) who did not provide data on the ethnicity of their sample. It is striking that a very high proportion of participants are female and White. Besides Kumanyika et al. (2005) who deliberately recruited African-Americans, the percentage of the sample described as White/Caucasian ranges from 94 – 100%. This is important because we do not know whether the findings can be generalised to men or participants from different ethnic backgrounds. Also all of the studies were carried out in the USA, indicating a need for research in other countries.

Two studies (2, 5) describe their sample as “predominantly well-educated”. This is important given the link between social inequalities and obesity. As described in the introduction, those in lower social classes, particularly women, are more at risk. Furthermore, researchers tended to use newspaper advertisements to recruit so participants were arguably more motivated than other people who would also benefit from these interventions. Thus the generalisability of the studies to other populations and settings is questionable.

### **Outcome measure**

The degree of overweight in the patient groups and the types of outcomes reported did not differ markedly between studies, although as described in the results section, participants in the Kumanyika et al. (2005) study were heavier than participants in the other studies. All studies reported weight change as kilograms lost.

Weight entry criteria differed between studies. Four studies specified weight entry criteria according to BMI (in excess of 25 for one study (2), in excess of 27 for two studies (4, 5) and in excess of 30 for one study (3)). One study specified weight entry criteria according to percentage overweight according to Metropolitan Life Insurance Tables (6) or specified baseline weight had to be 20-100% over ideal body weight (1).

### **Methodological quality**

**Power:** All studies had some methodological limitations, particularly failure to carry out a power calculation. Only two (2, 3) of the studies report calculating the necessary sample size needed to detect a statistically significant difference.

**Length of longest follow-up:** Two studies (3, 5) had a long-term follow-up of 18 months; the rest having a follow-up of 12 months. For four studies (2, 3, 4, 6), the collection of their last follow-up coincided with the end of the maintenance programme. As none of the studies contained assessments longer than 18 months it is impossible to know how effective psychological interventions are over a longer period of time.

**Randomisation:** Although all of the studies state that they randomised participants, only one study (3) described how participants were randomised.

**Blinding:** All studies failed to report information as to whether outcome assessors, providers and clients were blind to condition, apart from one (3), who stated that it was not feasible to mask the study co-ordinator who was responsible for collecting information such as weight and height.

**Attrition:** Attrition rates for intervention arms of the studies ranged from 10% (1) to 35% at 18 month follow-up (3) (see Table D2 for details). All but one of the studies had at least one arm of the intervention with an attrition rate of over 15% reflecting previous research which has documented that an important problem in long-term weight maintenance programmes is a marked decrease in adherence over time (Wadden, Foster and Letizia; 1994). The relative high attrition rates suggest it is only the very motivated who remain in the study and suggest that results outside of research settings and in the community would be less

favourable. The weight-focused intervention in the Leermakers et al. study and the brief weekly phone contacts intervention in the Wing et al. study had the lowest attrition rates of 10% and 12% respectively. This suggests these methods of maintenance treatments may be more acceptable to participants.

**Intention to Treat (ITT):** Four studies carried out an ITT analysis (1, 2, 4, 5). In each of these studies the ITT results did not differ from the results based on those who remained in the study.

### **Understanding behaviour change**

As mentioned above it is difficult to account for the results of this review because of differences in design and a lack of measurement of underlying psychological processes. This difficulty is not particular to studies in weight maintenance, but applies to the wider literature on psychological interventions for behaviour change. As Michie and Abraham (2004) have argued, "It is difficult to identify particular techniques that are critical to intervention effectiveness because these are confounded with each other and with other intervention characteristics, including form of delivery, intensity and duration" (p.46).

Further research is needed which controls for differences in intervention characteristics and which includes measurements to help identify the psychological characteristics which explain outcomes in our attempt to understand how the intervention may impact upon cognitions and behaviours.

### **Limitations**

This review has several limitations. It was outside the scope of this review to look at other strategies for weight loss maintenance; in particular researchers have looked at mechanisms to increase exercise maintenance, such as the use of home-based exercise (Perri et al., 1997) and personal trainers and financial incentives (Wing, Jeffery Pronk et al., 1996). Studies that may have included a psychological component but which were predominantly focused on another intervention, such as drugs, diet and exercise were not included in this review. Also excluded were studies of psychological interventions for obesity which do not specifically look at weight loss maintenance but have long-term follow-ups where participants have successfully maintained their weight.

The review may suffer from publication bias. A search of the grey literature was not undertaken and this review does not contain any unpublished interventions. This limitation was hoped to be minimised as key authors were contacted to see



if they were aware of any other relevant interventions that had not been identified, however unfortunately none responded.

### **Implications for practice**

Existing evidence suggests psychological weight loss maintenance interventions can be effective for adults who are overweight or obese. Previous reviews have shown extended contact is effective (Perri and Corsica, 2002). Promising approaches include therapist led group problem-solving therapy but more research is needed to demonstrate the effectiveness of these treatments.

### **Implications for research**

- Future studies should include:
  - larger participant samples so studies have sufficient power to detect differences in treatments;
  - more diverse participant samples (i.e., non-White, lower socio-economic groups and male participants);
  - follow-ups of longer duration so we can ascertain how participants fare over a greater time period, after the maintenance programme has ended. At present, because of relatively short follow-ups, it is not known if interventions actually improve long-term outcomes or just delay weight regain.
- Current research has tended to be carried out in academic medical centres where experienced therapists treat motivated clients. “Research now is needed to find effective methods of providing treatment in primary care and community practice” (p.159S; Wadden, Butryn and Byrne, 2004).
- All the studies included in this review were carried out in the USA demonstrating a need for research in other countries.
- More attention should be paid to possible underlying psychological mechanisms accounting for effective interventions so we may begin to understand what processes may underlie effective weight maintenance behaviours.
- Given the problems with participant adherence and expense of ongoing clinical treatments, it is important to continue to explore alternative methods of long-term treatments, such as the internet.
- Qualitative research to further understand why participants withdraw

from studies and the type(s) of support they would like.

### **Unanswered questions**

- Which psychological interventions are most effective for weight loss maintenance?
- Which psychological processes are responsible for behaviour change and maintenance of behaviour?
- Are interventions effective for different demographic groups, including different ethnic groups, men and lower socio-economic groups?

### **Conclusions**

The results of a previous review taken with the results of the current review, suggest critical factors for psychological weight loss maintenance interventions include continued therapist contact, social support and problem solving of presenting problems. However, there are insufficient research studies on psychological interventions for weight loss maintenance for conclusions to be drawn about whether they are, or are not effective, at helping people maintain weight loss.

Research in this area, using larger samples and based on psychological interventions which have been shown to be effective in helping people to lose weight initially, would be extremely valuable in order to determine, a) whether such interventions are effective and b) if there are found to be effective, which components are responsible for effectiveness.

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# APPENDICES





**1 in 3 song lyrics**

OOOO yeah yeah.... Yeah  
You're telling me lies  
You're Hurting my heart so deep  
I don't want to cry  
I ain't got time  
I wanted to hide  
But most of the time you found me... you found me  
Yeah

Now I'm just the one in three with an STD  
They say what goes around comes right back again  
Why you gotta do this to me?

Now let me teach you a lesson... about when them teenagers become pregnant  
Its all gravy, things start innocent but you never realised that there are feelings with  
Then you get caught open, then you realised you should have said no then  
You both fell for the problem; you both had sex without a condom  
On the way he paid for her bus fare, which led home which led o the upstairs  
Which led to the kissing, hugging, squeezing, touching  
Now look at the aftermath, a baby, now no more jamming in the ends, no more hanging  
with friends  
So don't come on without a glove on

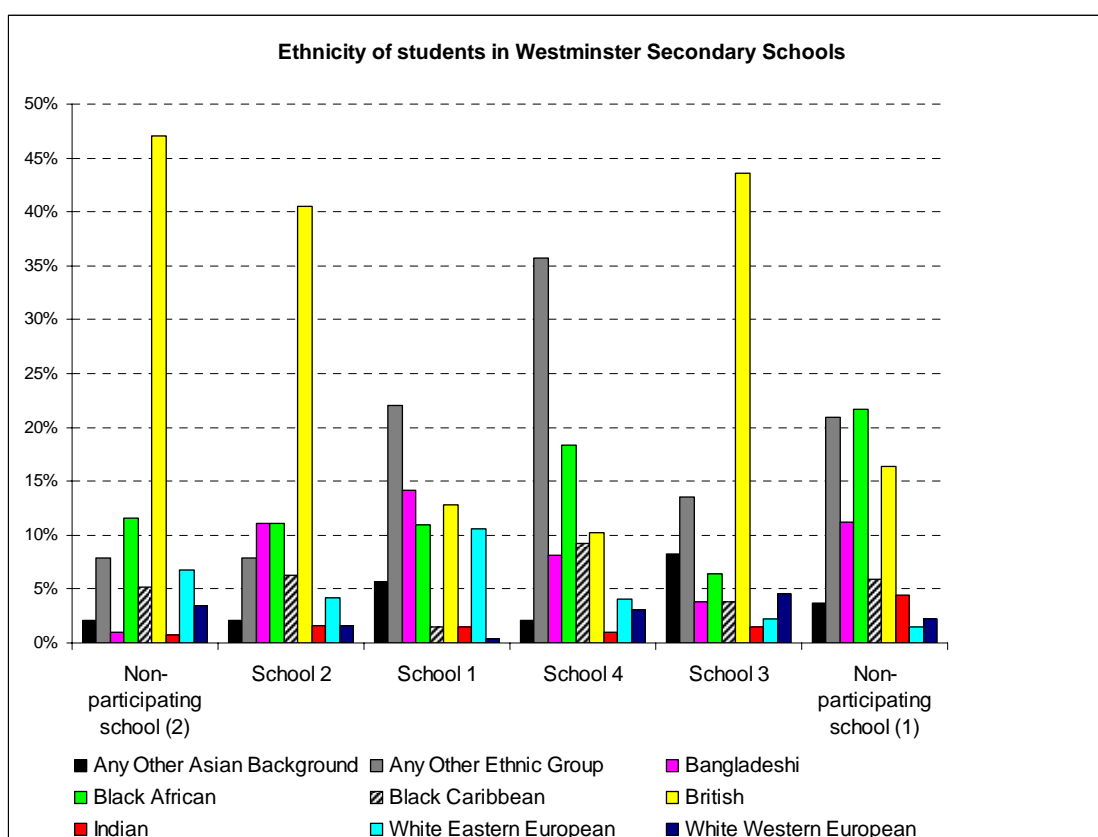
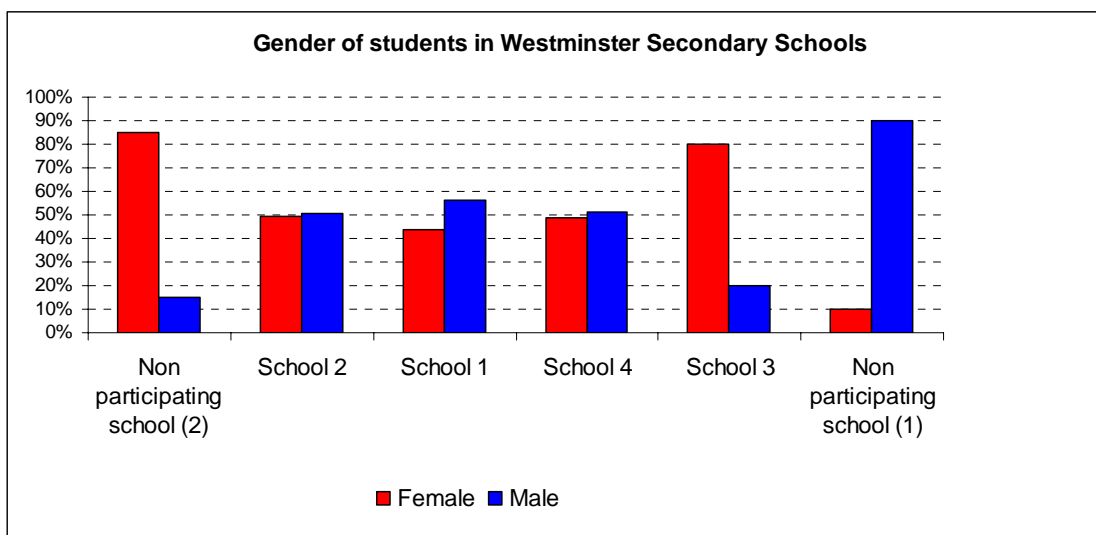
Now I'm just the one in three with an STD  
They say what goes around comes right back again  
Why you gotta do this to me?

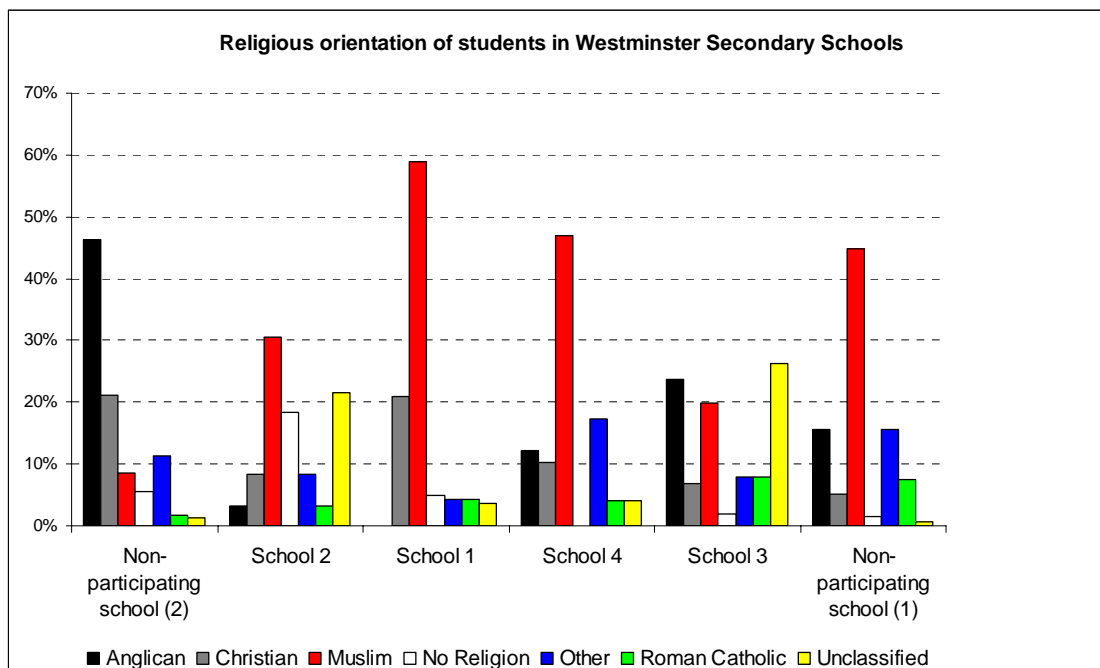
I was two stepping up in rave when I was struck by a female looking my way  
She was real flirty, aching real dirty, grabbed my dick telling me Zak I'm thirsty  
I was like that mean shine. Lets get out of here. That means mines  
Back to my house on Mozart street Flat 19  
As soon as we entered se got down on her knees and opened my fly  
Swallowed, opened her eyes, got on her feet turned around and sighed  
I told her there's no dom doing the shit so long  
She told me I'm on the pill I said muck that girl you know the deal  
She got upset and left so I called it a night and slept in my bed  
One morning I'm still doing what I'm doing then I'm getting checked  
I went there got checked gave them my number then I hopped stepped, two months later  
they phoned me telling me I had herpes on my homie

No objection because of an erection suffering from a transmitted infection  
Let me make a suggestion, next time use some protection,  
Protect your Richard, know what you're doing, respect your Richard  
You don't want an infect your Richard know what you're doing when you inject your  
Richard

## **Bedroom Business DVD**

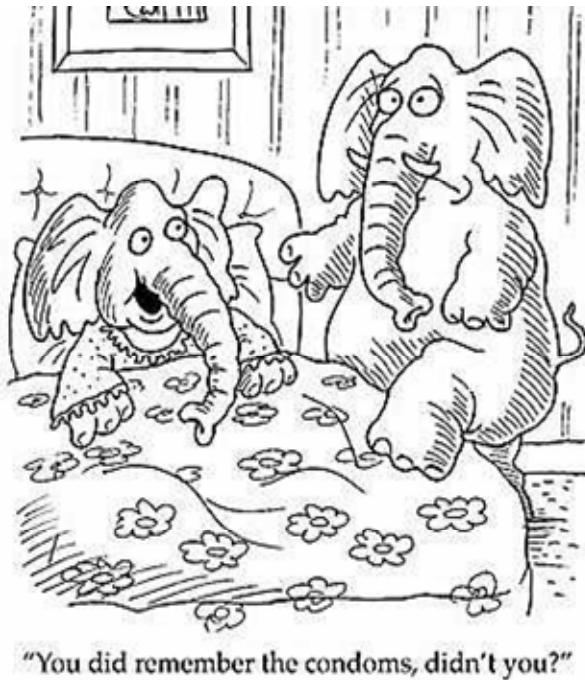
## Student Demographics



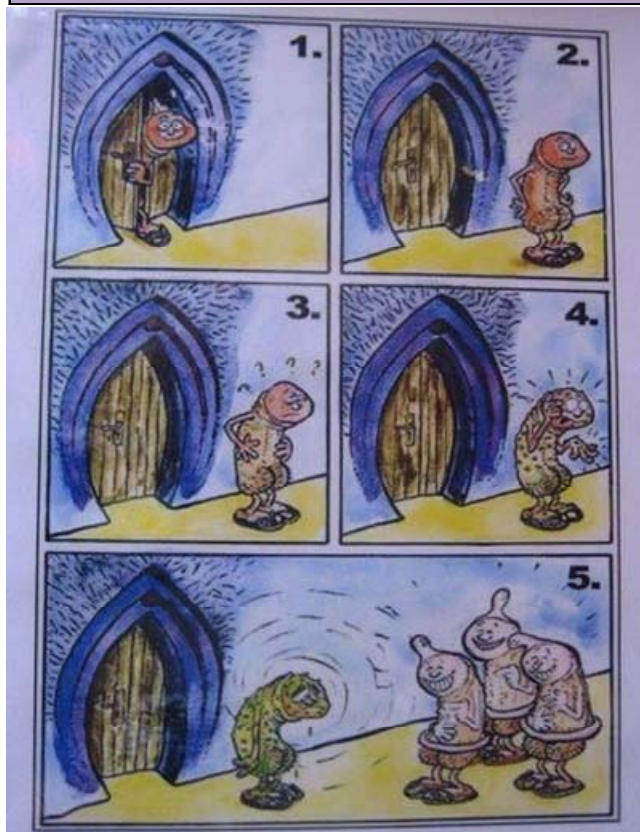


#### Westminster free school meal (FSM) data

| Type                   | Name                         | FSM          | Non FSM      | Total        | FSM %      | Non FSM %  |
|------------------------|------------------------------|--------------|--------------|--------------|------------|------------|
| Secondary              | Non-participating school (2) | 106          | 665          | 771          | 14%        | 86%        |
| Secondary              | School 2                     | 261          | 832          | 1,093        | 24%        | 76%        |
| Secondary              | School 1                     | 491          | 558          | 1,049        | 47%        | 53%        |
| Secondary              | School 4                     | 229          | 363          | 592          | 39%        | 61%        |
| Secondary              | School 3                     | 272          | 379          | 651          | 42%        | 58%        |
| Secondary              | Non-participating school (1) | 108          | 472          | 580          | 19%        | 81%        |
| <b>Secondary Total</b> |                              | <b>1,629</b> | <b>3,689</b> | <b>5,318</b> | <b>31%</b> | <b>69%</b> |



## Sexual Health Of Young People



Sexual Health of Young People

BEFORE YOU START THE QUESTIONNAIRE PLEASE FILL IN THE FOLLOWING INFORMATION. THIS IS FOR US TO BE ABLE TO SORT THE QUESTIONNAIRE. WE CANNOT IDENTIFY ANYONE ON THE BASIS OF THIS CODE.

**SORTING CODE**

1) Please enter the 1<sup>st</sup> and 2<sup>nd</sup> letter of the **name of your street**:

For example, if you live in West Street, you would enter 'WE'

2) Please enter the 1<sup>st</sup> and 2<sup>nd</sup> letter of **your mother's first name**:

For example, if your mother was called Asmita, you would write, 'AS'

3) Please enter the 1<sup>st</sup> and 2<sup>nd</sup> letter of **your father's first name**:

For example, if your father was called Kareem, you would write, 'KA'

4) Please write today's date:

.....

**How to complete the questionnaire**

Some important points to remember are.....

- **Read the Question:** Most questions have a choice of answers. Please make sure to read the instructions underneath EVERY question.
- **Skipping questions:** Some questions will ask you to jump to another question depending on your response. Please make sure that you complete ALL the required questions.
- **Research team:** If anything is unclear please don't hesitate to ask one of the researchers for assistance - we're here to help you! The researchers will not judge you, and anything you talk about with us is confidential.

## Part 1 - Information about yourself



1) Are you male or female?

Tick ✓ **ONE** box only

Male ☐<sub>1</sub>

Female ☐<sub>2</sub>

2) How old are you?

Tick ✓ **ONE** box only

15 years old ☐<sub>1</sub>

16 years old ☐<sub>2</sub>

17 years old ☐<sub>3</sub>

18 years old ☐<sub>4</sub>

19 years old ☐<sub>5</sub>

Other (please write) ☐<sub>6</sub>  
\_\_\_\_\_ years old

3) Are you currently at school or college?

Tick ✓ **ONE** box only

**School & 6<sup>th</sup> Form**

Yes - year 12 ☐<sub>1</sub>

Yes - year 13 ☐<sub>2</sub>

**College**

Yes - year 1 college ☐<sub>3</sub>

Yes - year 2 college ☐<sub>4</sub>

4) Have you felt sexually attracted to (fancied).....?

Tick ✓ **ONE** box only

People of the **opposite** sex only ☐<sub>1</sub>

People of both the **same** and **opposite** sex ☐<sub>3</sub>

People of the **same** sex only ☐<sub>2</sub>

Don't know / Not sure ☐<sub>4</sub>



## 5) Which ethnic background do you belong to?

Tick ✓ **ONE** box only**ARAB OR ARAB BRITISH**

Arab

☐ 1

North African

☐ 2

Moroccan

☐ 3

Any other (please write here.....)

☐ 4**ASIAN OR ASIAN BRITISH**

Indian/British Indian

☐ 17

Pakistani/British Pakistani

☐ 18

Bangladeshi/British Bangladeshi

☐ 19

East African Asian

☐ 20

Any other Asian background (please write here.....)

☐ 21**WHITE**

British

☐ 5

Irish

☐ 6

White Eastern European

☐ 7White Western European  
Any other White Background  
(please write here.....)☐ 8☐ 9**BLACK OR BLACK BRITISH**

Black Caribbean

☐ 22

Black African

☐ 23

Any other Black background (please write here.....)

☐ 24**OTHER ETHNIC GROUP****MIXED**

White &amp; Black Caribbean

☐ 10

White &amp; Black African

☐ 11

White &amp; Asian

☐ 12

Black &amp; Asian

☐ 13

Black &amp; Chinese

☐ 14

Chinese &amp; White

☐ 15Any other Mixed background  
(please write here.....)☐ 16

Chinese

☐ 25

Vietnamese

☐ 26

Japanese

☐ 27

Filipino

☐ 28

Kurdish

☐ 29

Iranian

☐ 30

Other (please write here.....)

☐ 31

I do not wish to answer

☐ 32

## 6) Which London borough do you live in?

Tick ✓ **ONE** box

- Barking and Dagenham ☐ <sub>1</sub>
- Barnet ☐ <sub>2</sub>
- Bexley ☐ <sub>3</sub>
- Brent ☐ <sub>4</sub>
- Bromley ☐ <sub>5</sub>
- Camden ☐ <sub>6</sub>
- Croydon ☐ <sub>7</sub>
- Ealing ☐ <sub>8</sub>
- Enfield ☐ <sub>9</sub>
- Greenwich ☐ <sub>10</sub>
- Hackney ☐ <sub>11</sub>
- Hammersmith and Fulham ☐ <sub>12</sub>
- Haringey ☐ <sub>13</sub>
- Harrow ☐ <sub>14</sub>
- Havering ☐ <sub>15</sub>
- Hillingdon ☐ <sub>16</sub>
- Hounslow ☐ <sub>17</sub>

- Islington ☐ <sub>18</sub>
- Kensington and Chelsea ☐ <sub>19</sub>
- Kingston ☐ <sub>20</sub>
- Lambeth ☐ <sub>21</sub>
- Lewisham ☐ <sub>22</sub>
- Merton ☐ <sub>23</sub>
- Newham ☐ <sub>24</sub>
- Redbridge ☐ <sub>25</sub>
- Richmond ☐ <sub>26</sub>
- Southwark ☐ <sub>27</sub>
- Sutton ☐ <sub>28</sub>
- Tower Hamlets ☐ <sub>29</sub>
- Waltham Forest ☐ <sub>30</sub>
- Wandsworth ☐ <sub>31</sub>
- Westminster ☐ <sub>32</sub>
- Don't know ☐ <sub>33</sub>
- Other (please write) ☐ <sub>34</sub>
- .....

## 7) Which religious group do you belong to?

Tick ✓ **ONE** box only

- I don't believe in a religion/God ☐ <sub>1</sub>
- Christian - Church of England ☐ <sub>2</sub>
- Christian - Roman Catholic ☐ <sub>3</sub>
- Christian - Other ☐ <sub>4</sub>
- Jewish ☐ <sub>5</sub>

- Buddhist ☐ <sub>6</sub>
- Muslim / Islam ☐ <sub>7</sub>
- Hindu ☐ <sub>8</sub>
- Sikh ☐ <sub>9</sub>
- Don't know ☐ <sub>10</sub>
- Other (please write) ☐ <sub>11</sub>
- .....

## PART 2 - Sexual Experiences

In this section, we're interested in learning more about young people and sexual experiences. Young people have a variety of sexual experiences, including having sex at different ages, having partners of the same sex, both sexes or the opposite sex. We will not judge you - all your experiences are valuable, whatever they are.

Your answers are **confidential**, which means nobody will see your answers. Please answer truthfully.



This outlines what we mean by 'sex':

- A man's penis in a woman's vagina (vaginal sex) or
- A man's penis in a woman's anus (anal sex) or
- A man's penis in a man's anus (anal sex)

This outlines what we mean by 'casual' and 'steady' partner:

**Casual** partner: someone you have sex with once or infrequently (e.g., one night stand)

**Steady** partner: someone you have sex with in an exclusive relationship, where you are only having sex with each other and no-one else (e.g., a steady boyfriend/girlfriend)

8) Have you **ever** had sex?

Tick ✓ **ONE** box only

Yes ☐<sub>1</sub> Continue below

No ☐<sub>2</sub> GO TO PART 3 ON PAGE 9

Don't know ☐<sub>3</sub> GO TO PART 3 ON PAGE 9

9) With how many **different people** have you **ever** had sex with?

Tick ✓ **ONE** box only

1 person ☐<sub>1</sub>

5 people ☐<sub>5</sub>

2 people ☐<sub>2</sub>

6 people ☐<sub>6</sub>

3 people ☐<sub>3</sub>

7 or more people ☐<sub>7</sub>

4 people ☐<sub>4</sub>

Don't know ☐<sub>8</sub>

10) Are you currently in a **relationship**?

Tick ✓ **ONE** box only

Yes ☐<sub>1</sub> Continue below

No ☐<sub>2</sub> GO TO QUESTION 12

11) How long have you been with your current partner?

Tick ✓ **ONE** box only

0 - 3 months ☐<sub>1</sub>

9-12 months ☐<sub>4</sub>

3 - 6 months ☐<sub>2</sub>

Over 12 months ☐<sub>5</sub>

6 - 9 months ☐<sub>3</sub>

**Sexual Behaviour in the Last Month**

12) Have you had sex in the last month?

Tick ✓ **ONE** box only

Yes ☐<sub>1</sub> **CONTINUE BELOW**

No ☐<sub>2</sub> **GO TO PART 3 ON PAGE 9**

Don't know ☐<sub>3</sub> **GO TO PART 3 ON PAGE 9**

13) How many **different people** have you had sex with in the last month?

Tick ✓ **ONE** box only

1 ☐<sub>1</sub>

4 ☐<sub>4</sub>

7 ☐<sub>7</sub>

2 ☐<sub>2</sub>

5 ☐<sub>5</sub>

8 ☐<sub>8</sub>

3 ☐<sub>3</sub>

6 ☐<sub>6</sub>

9 or more ☐<sub>9</sub>

14) How many **times** have you had sex in the last month?

Tick ✓ **ONE** box only

1 ☐<sub>1</sub>

4 ☐<sub>4</sub>

7 ☐<sub>7</sub>

10 ☐<sub>10</sub>

2 ☐<sub>2</sub>

5 ☐<sub>5</sub>

8 ☐<sub>8</sub>

11 or more ☐<sub>11</sub>

3 ☐<sub>3</sub>

6 ☐<sub>6</sub>

9 ☐<sub>9</sub>

15) How many **times** have you used a **condom** for sex in the last month?

Tick ✓ **ONE** box only

0 ☐<sub>0</sub>

3 ☐<sub>3</sub>

6 ☐<sub>6</sub>

9 ☐<sub>9</sub>

1 ☐<sub>1</sub>

4 ☐<sub>4</sub>

7 ☐<sub>7</sub>

10 ☐<sub>10</sub>

2 ☐<sub>2</sub>

5 ☐<sub>5</sub>

8 ☐<sub>8</sub>

11 or more ☐<sub>11</sub>

16) How many **times** have you had a **condom break, leak or slip off** the penis in the **last month**?

Tick ✓ **ONE** box only

|   |   |   |   |
|---|---|---|---|
| 0 <input type="checkbox"/> <sub>0</sub> | 3 <input type="checkbox"/> <sub>3</sub> | 6 <input type="checkbox"/> <sub>6</sub> | 9 <input type="checkbox"/> <sub>9</sub>           |
| 1 <input type="checkbox"/> <sub>1</sub> | 4 <input type="checkbox"/> <sub>4</sub> | 7 <input type="checkbox"/> <sub>7</sub> | 10 <input type="checkbox"/> <sub>10</sub>         |
| 2 <input type="checkbox"/> <sub>2</sub> | 5 <input type="checkbox"/> <sub>5</sub> | 8 <input type="checkbox"/> <sub>8</sub> | 11 or more <input type="checkbox"/> <sub>11</sub> |

17) How many **times** have you put the **condom on after starting sex or taken it off before sex was over** in the **last month**?

Tick ✓ **ONE** box only

|   |   |   |   |
|---|---|---|---|
| 0 <input type="checkbox"/> <sub>0</sub> | 3 <input type="checkbox"/> <sub>3</sub> | 6 <input type="checkbox"/> <sub>6</sub> | 9 <input type="checkbox"/> <sub>9</sub>           |
| 1 <input type="checkbox"/> <sub>1</sub> | 4 <input type="checkbox"/> <sub>4</sub> | 7 <input type="checkbox"/> <sub>7</sub> | 10 <input type="checkbox"/> <sub>10</sub>         |
| 2 <input type="checkbox"/> <sub>2</sub> | 5 <input type="checkbox"/> <sub>5</sub> | 8 <input type="checkbox"/> <sub>8</sub> | 11 or more <input type="checkbox"/> <sub>11</sub> |

18) Have you had sex with a **casual** partner in the **last month**?

Tick ✓ **ONE** box only

Yes ☐<sub>1</sub> **CONTINUE BELOW**

No ☐<sub>2</sub> **GO TO QUESTION 20**

Don't know ☐<sub>3</sub> **GO TO QUESTION 20**

|     |  |                  |                     |                |       |
|-----|--|------------------|---------------------|----------------|-------|
| 19) | In the <b>last month</b> , how often have you used a <b>condom</b> to have sex with a <b>casual</b> partner?<br>Please circle <b>ONE</b> of the numbers below. |                  |                     |                |       |
|     | Always   | Most of the time | About half the time | Not very often | Never |
|     | 1  | 2                | 3                   | 4              | 5     |

20) Have you had sex with a **steady** partner in the **last month**?

Tick ✓ **ONE** box only

Yes ☐<sub>1</sub> **CONTINUE BELOW**

No ☐<sub>2</sub> **GO TO PART 3 ON PAGE 9**

Don't know ☐<sub>3</sub> **GO TO PART 3 ON PAGE 9**

|     |  |                  |                     |                |       |
|-----|--|------------------|---------------------|----------------|-------|
| 21) | In the <b>last month</b> , how often have you used a <b>condom</b> to have sex with a <b>steady</b> partner?<br>Please circle <b>ONE</b> of the numbers below. |                  |                     |                |       |
|     | Always   | Most of the time | About half the time | Not very often | Never |
|     | 1  | 2                | 3                   | 4              | 5     |

### Part 3 Thoughts about using condoms

#### PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

The questions below ask about using condoms for sex. We would like to know what you think about these issues, regardless of whether you have already had sex with someone or not. If you are sexually active and expect to have sex in the next month, please answer the following questions based on **what you think will happen in the next month**.

If you are not having sex at the moment or do not have plans to have sex in the next month, **IMAGINE what you would do** if you were to have sex in the next month.

Some questions ask about 'casual' partners and some ask about 'steady' partners. If you do not have a casual and/or steady partner, **IMAGINE what you would do** if you were to have sex in the next month with a casual and/or steady partner.

Please read the following questions carefully and give an **honest** answer.

#### Intentions to use condoms

Please circle the number that best describes your thoughts and feelings. Please circle the number in **EACH ROW** that best represents your view.

| 22) |  | Strongly Disagree <span style="float: right;">Strongly Agree</span> |   |   |   |   |
|-----|--|---|---|---|---|---|
| a)  | I intend to use a condom every time I have sex in the next month with a <b>casual</b> partner?   | 1   | 2 | 3 | 4 | 5 |
| b)  | I will try to use a condom every time I have sex in the next month with a <b>casual</b> partner? | 1   | 2 | 3 | 4 | 5 |
| c)  | I plan to use a condom every time I have sex in the next month with a <b>casual</b> partner?     | 1   | 2 | 3 | 4 | 5 |
| d)  | I intend to use a condom every time I have sex in the next month with a <b>steady</b> partner?   | 1   | 2 | 3 | 4 | 5 |

**Attitudes**

Please indicate the extent to which you agree with **ALL** of the following statements by circling the number in **EACH ROW** that best represents your view.

|            |  |   |   |   |   |   |                 |
|------------|--|---|---|---|---|---|-----------------|
| <b>23)</b> | For me using a condom every time I have sex in the next month with a <b>casual</b> partner would be..... |   |   |   |   |   |                 |
| <b>a)</b>  | <b>Worthless</b>   | 1 | 2 | 3 | 4 | 5 | <b>Valuable</b> |

|           |  |   |   |   |   |   |                   |
|-----------|--|---|---|---|---|---|-------------------|
|           | For me using a condom every time I have sex in the next month with a <b>casual</b> partner would be..... |   |   |   |   |   |                   |
| <b>b)</b> | <b>Harmful</b>   | 1 | 2 | 3 | 4 | 5 | <b>Beneficial</b> |

|           |  |   |   |   |   |   |             |
|-----------|--|---|---|---|---|---|-------------|
|           | For me using a condom every time I have sex in the next month with a <b>casual</b> partner would be..... |   |   |   |   |   |             |
| <b>c)</b> | <b>Bad</b>   | 1 | 2 | 3 | 4 | 5 | <b>Good</b> |

|           |  |   |   |   |   |   |                 |
|-----------|--|---|---|---|---|---|-----------------|
|           | For me using a condom every time I have sex in the next month with a <b>casual</b> partner would be..... |   |   |   |   |   |                 |
| <b>d)</b> | <b>Unpleasant</b>  | 1 | 2 | 3 | 4 | 5 | <b>Pleasant</b> |

|           |  |   |   |   |   |   |                  |
|-----------|--|---|---|---|---|---|------------------|
|           | For me using a condom every time I have sex in the next month with a <b>casual</b> partner would be..... |   |   |   |   |   |                  |
| <b>e)</b> | <b>Unenjoyable</b>   | 1 | 2 | 3 | 4 | 5 | <b>Enjoyable</b> |

|           |  |   |   |   |   |   |             |
|-----------|--|---|---|---|---|---|-------------|
|           | For me using a condom every time I have sex in the next month with a <b>steady</b> partner would be..... |   |   |   |   |   |             |
| <b>f)</b> | <b>Bad</b>   | 1 | 2 | 3 | 4 | 5 | <b>Good</b> |

**Beliefs**

Please indicate the extent to which you agree with **ALL** of the following statements by circling the number in **EACH ROW** that best represents your view.

| 24) |   | Not at all true |   |   |   |   | Very true |
|-----|---|-----------------|---|---|---|---|-----------|
| g)  | Using condoms makes sex less intimate and romantic  | 1               | 2 | 3 | 4 | 5 |           |
| h)  | Condoms are messy                                   | 1               | 2 | 3 | 4 | 5 |           |
| i)  | Using condoms means less physical pleasure from sex | 1               | 2 | 3 | 4 | 5 |           |
| j)  | Condoms break the mood for sex                      | 1               | 2 | 3 | 4 | 5 |           |

**Risk of infection**

Please indicate the extent to which you agree with **ALL** of the following statements by circling the number in **EACH ROW** that best represents your view.

| 25) |  | Strongly Disagree |   |   |   |   | Strongly Agree |
|-----|--|-------------------|---|---|---|---|----------------|
| a)  | If I do not use condoms, I run a big risk of getting infected with a sexually transmitted infection    | 1                 | 2 | 3 | 4 | 5 |                |
| b)  | If I do not use condoms, I run a high risk of getting infected with a sexually transmitted infection.  | 1                 | 2 | 3 | 4 | 5 |                |
| c)  | If I do not use condoms, the chance of getting infected with a sexually transmitted infection is high. | 1                 | 2 | 3 | 4 | 5 |                |



**What do other people think?**

Please indicate the extent to which you agree with **ALL** of the following statements by circling the number in **EACH ROW** that best represents your view.

| 26) |   | Strongly Disagree <span style="float: right;">Strongly Agree</span> |   |   |   |   |
|-----|---|---|---|---|---|---|
| a)  | Most people who are important to me think that I should use a condom every time I have sex in the next month with a <b>casual</b> partner | 1   | 2 | 3 | 4 | 5 |
| b)  | My friends think that I should use a condom every time I have sex with a <b>casual</b> partner in the next month                          | 1   | 2 | 3 | 4 | 5 |
| c)  | It is expected of me that I should use a condom every time I have sex with a <b>casual</b> partner in the next month                      | 1   | 2 | 3 | 4 | 5 |
| d)  | Most people who are important to me think that I should use a condom every time I have sex in the next month with a <b>steady</b> partner | 1   | 2 | 3 | 4 | 5 |

**What do other people do?**

Please indicate the extent to which you agree with **ALL** of the following statements by circling the number in **EACH ROW** that best represents your view.

| 27) |   | Strongly Disagree <span style="float: right;">Strongly Agree</span> |   |   |   |   |
|-----|---|---|---|---|---|---|
| a)  | Most of my friends will use a condom every time they have sex with a <b>casual</b> partner in the next month                  | 1   | 2 | 3 | 4 | 5 |
| b)  | Most young people my age will use a condom every time they have sex with a <b>casual</b> partner in the next month            | 1   | 2 | 3 | 4 | 5 |
| c)  | Most people who are important to me will use a condom every time they have sex with a <b>casual</b> partner in the next month | 1   | 2 | 3 | 4 | 5 |
| d)  | Most of my friends will use a condom every time they have sex with a <b>steady</b> partner in the next month                  | 1   | 2 | 3 | 4 | 5 |
| 28) | My <b>casual</b> sexual partner/s will think that we should use a condom every time we have sex in the next month             | 1   | 2 | 3 | 4 | 5 |
| 29) | My <b>steady</b> sexual partner/s will think that we should use a condom every time we have sex in the next month             | 1   | 2 | 3 | 4 | 5 |

**Control over using condoms**

Please indicate the extent to which you agree with **ALL** of the following statements by circling the number in **EACH ROW** that best represents your view.

| 30) | How much control do you have over whether you will use a condom....     | No Control |   |   |   | Complete Control |
|-----|---|------------|---|---|---|------------------|
| a)  | every time you have sex with a <b>casual</b> partner in the next month? | 1          | 2 | 3 | 4 | 5                |
| b)  | every time you have sex with a <b>steady</b> partner in the next month? | 1          | 2 | 3 | 4 | 5                |

|    |  | Strongly Disagree |   |   |   | Strongly Agree |
|----|--|-------------------|---|---|---|----------------|
| c) | I feel in complete control of whether or not I use a condom every time I have sex with a <b>casual</b> partner in the next month | 1                 | 2 | 3 | 4 | 5              |
| d) | It is mostly up to me whether or not I use a condom every time I have sex with a <b>casual</b> partner in the next month?        | 1                 | 2 | 3 | 4 | 5              |
| e) | It is mostly up to me whether or not I discuss condom use every time I have sex with a <b>casual</b> partner in the next month?  | 1                 | 2 | 3 | 4 | 5              |

Please indicate the extent to which you agree with **ALL** of the following statements by circling the number in **EACH ROW** that best represents your view.

| 31) |  | Very<br>Difficult |   |   |   |   | Very<br>Easy |
|-----|--|-------------------|---|---|---|---|--------------|
| a)  | For me to use a condom every time I have sex with a <b>casual</b> partner in the next month will be... | 1                 | 2 | 3 | 4 | 5 |              |

|    | I am confident that I will be able to use a condom every time....                           | Strongly<br>Disagree |   |   |   |   | Strongly<br>Agree |
|----|---|----------------------|---|---|---|---|-------------------|
| b) | .... when I have sex with a <b>casual</b> partner in the next month                         | 1                    | 2 | 3 | 4 | 5 |                   |
| c) | ....when I have sex with a <b>steady</b> partner in the next month                          | 1                    | 2 | 3 | 4 | 5 |                   |
| d) | ....when I have sex with a <b>casual</b> partner, even after a drink or two                 | 1                    | 2 | 3 | 4 | 5 |                   |
| e) | ....when I have sex with a <b>casual</b> partner, even if I get very excited and can't wait | 1                    | 2 | 3 | 4 | 5 |                   |

**Obtaining condoms**

Please indicate the extent to which you agree with **ALL** of the following statements by circling the number in **EACH ROW** that best represents your view.

| 32) | In the next month if you have sex with someone, do you intend to... | Strongly do not intend to |   |   |   |   | Strongly intend to |
|-----|---|---------------------------|---|---|---|---|--------------------|
| a)  | get condoms of your own   | 1                         | 2 | 3 | 4 | 5 |                    |
| b)  | carry condoms when you go out                                       | 1                         | 2 | 3 | 4 | 5 |                    |
| c)  | discuss condoms with your partner before having sex                 | 1                         | 2 | 3 | 4 | 5 |                    |
| d)  | suggest condoms to your partner                                     | 1                         | 2 | 3 | 4 | 5 |                    |

**Confidence about using condoms**

Please indicate the extent to which you agree with **ALL** of the following statements by circling the number in **EACH ROW** that best represents your view.

| 33) |  | Strongly Disagree |   |   |   |   | Strongly Agree |
|-----|--|-------------------|---|---|---|---|----------------|
| a)  | I feel confident I could successfully remove and dispose of a condom when I have sex | 1                 | 2 | 3 | 4 | 5 |                |
| b)  | I feel confident in my ability to put a condom on myself or my partner               | 1                 | 2 | 3 | 4 | 5 |                |
| c)  | I feel confident in my ability to put a condom on myself or my partner quickly       | 1                 | 2 | 3 | 4 | 5 |                |
| d)  | I feel confident that I could use a condom successfully                              | 1                 | 2 | 3 | 4 | 5 |                |

**Communication about using condoms**

Please indicate the extent to which you agree with **ALL** of the following statements by circling the number in **EACH ROW** that best represents your view.

| 34) |   | Very Difficult |   |   |   |   | Very Easy |  |
|-----|---|----------------|---|---|---|---|-----------|--|
|     |   | 1              | 2 | 3 | 4 | 5 |           |  |
| a)  | How easy do you think it would be for you to discuss condom use with a <b>casual</b> partner in the next month? |                |   |   |   |   |           |  |
| b)  | How easy do you think it would be for you to discuss condom use with a <b>steady</b> partner in the next month? |                |   |   |   |   |           |  |

|    |   |   |   |   |   |   |                  |
|----|---|---|---|---|---|---|------------------|
|    | How comfortable do you think you'll be when talking to a <b>casual</b> partner about condoms in the next month? |   |   |   |   |   |                  |
| c) | Very Uncomfortable  | 1 | 2 | 3 | 4 | 5 | Very Comfortable |

|    |   |   |   |   |   |   |                  |
|----|---|---|---|---|---|---|------------------|
|    | How comfortable do you think you'll be when talking to a <b>steady</b> partner about condoms in the next month? |   |   |   |   |   |                  |
| d) | Very Uncomfortable  | 1 | 2 | 3 | 4 | 5 | Very Comfortable |

|    |  |   |   |   |   |   |           |
|----|--|---|---|---|---|---|-----------|
|    | How confident are you in your ability to suggest using condoms to a <b>casual</b> partner in the next month? |   |   |   |   |   |           |
| e) | Not at all   | 1 | 2 | 3 | 4 | 5 | Very much |

**Condoms**35) Tick ✓ **ONE** box on **EACH LINE**

|   | True                                  | False                                 | Don't know                            |
|---|---------------------------------------|---------------------------------------|---------------------------------------|
| a) It is a good idea to use cooking oil or Vaseline for lubrication when using a condom | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> |
| b) Two condoms are more effective than one  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> |
| c) There should be some space at the tip of a condom for ejaculation (semen/cum)        | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> |

**Sexually transmitted infections**36) Tick ✓ **ONE** box on **EACH LINE**

|   | True                                  | False                                 | Don't know                            |
|---|---------------------------------------|---------------------------------------|---------------------------------------|
| a) Sexually transmitted infections cannot be transmitted through oral sex (oral sex is mouth touching private parts / genitals) | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> |
| b) Sexually transmitted infections always have obvious (visible) symptoms   | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> |
| c) There is a cure for HIV  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> |

**Pregnancy**37) Tick ✓ **ONE** box on **EACH LINE**

|  | True                                  | False                                 | Don't know                            |
|--|---------------------------------------|---------------------------------------|---------------------------------------|
| a) A woman cannot get pregnant the first time she has sex with a man | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> |
| b) Having a shower or bath after sex will stop you getting pregnant  | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> |
| c) A woman can get pregnant if she has sex during her period         | <input type="checkbox"/> <sub>1</sub> | <input type="checkbox"/> <sub>2</sub> | <input type="checkbox"/> <sub>3</sub> |

**This is the end of the questionnaire. Well done and thank you for sharing your experiences, we really appreciate it.**

If you finish this questionnaire before the end of the session, there's an activity for you to complete on the next page.

## Pop-Culture quiz

- 1) Leona Lewis won the?
  - X-Factor
  - Pop Idol
  - Fame Academy
  - Britain's Got Talent
- 2) The creators of Little Britain?
  - Ant and Dec
  - Matt Lucas and David Walliams
  - Catherine Tate
- 3) Thriller was a gigantic hit performed by?
  - Chris Brown
  - Justin Timberlake
  - Michael Jackson
- 4) "How you doin?" was made famous by which Friends character?
  - Ross Geller
  - Joey Tribbiani
  - Chandler Bing
- 5) Cheryl Tweedy from Girls Aloud is married to which footballer?
  - David Beckham
  - Ryan Giggs
  - Ashley Cole
- 6) Tom Hanks won an Oscar for which film?
  - Cast Away
  - Forrest Gump
  - Saving Private Ryan
- 7) Paris Hilton starred in which reality show?
  - Big Brother
  - The Simple Life
  - I'm a Celebrity, Get Me Out of Here
- 8) Sienna Millers on/off boyfriend is?
  - Hayden Christensen
  - Jude Law
  - Jake Gyllenhaal

- 9) Kelly Rowland was part of which singing group?
- Destiny's Child
  - Pussycat Dolls
  - Spice Girls
- 10) Comedy starring Jim Carrey?
- Hitch
  - Liar Liar
  - American Pie
- 11) Spice Girls debut single?
- Umbrella
  - Baby one more time
  - Wannabe
- 12) Rihanna was born in?
- Barbados
  - Trinidad
  - Bermuda
- 13) Adam Brody came to fame for his role as?
- Dawson Leery on Dawson's Creek
  - Seth Cohen on The O.C
  - Clark Kent on Smallville
- 14) On Hollyoaks who had her heart broken when she found out that her boyfriend John Paul was gay?
- Hannah Ashworth
  - Nancy Hayton
  - Sarah Barnes
- 15) Which Oscar winner plays Captain Shakespeare in the film Star Dust?
- George Clooney
  - Mel Gibson
  - Robert De Niro
- 16) Who is Nicole Richie's famous dad?
- Shane Richie
  - Lionel Richie
  - Richie Cunningham
- 17) Hit TV show Buffy...?
- The Dog Walker
  - The Librarian
  - The Vampire Slayer



- 18) Nick Lachey's famous ex-wife?
- Britney Spears
  - Jessica Simpson
  - Christina Aguilera
- 19) In the music world who is Marshall Bruce Mathers III?
- Jay-Z
  - Dr. Dre
  - Eminem
- 20) In the original Star Wars trilogy who is training to become a Jedi?
- Han Solo
  - Luke Skywalker
  - Yoda
- 21) Which young actor was found dead in his New York apartment this January?
- Orlando Bloom
  - Heath Ledger
  - Joshua Jackson
- 22) Back to Black is which female artists' album?
- Amy Winehouse
  - Pink
  - Lil' Kim
- 23) Gwen Stefani was the lead singer of which band?
- Sugarbabes
  - Scissor Sisters
  - No Doubt
- 24) Lead actor in Pirates of the Caribbean film trilogy?
- Johnny Depp
  - Tom Cruise
  - Keanu Reeves
- 25) Who is the father of Spice Girl Mel B's daughter?
- Denzel Washington
  - Will Smith
  - Eddie Murphy

**Please turn over for the answers!**

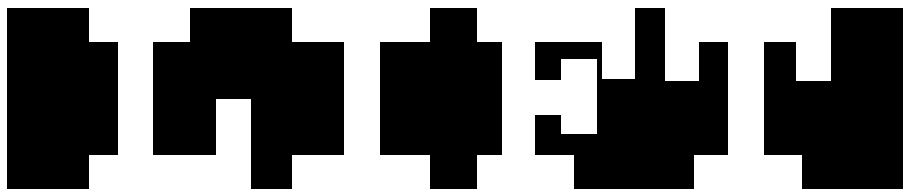
### **Answers to pop-quiz**

- 1) X-Factor
- 2) Matt Lucas and David Walliams
- 3) Michael Jackson
- 4) Joey Tribbiani
- 5) Ashley Cole
- 6) Forrest Gump
- 7) The Simple Life
- 8) Jude Law
- 9) Destiny's Child
- 10) Liar Liar
- 11) Wannabe
- 12) Barbados
- 13) Seth Cohen on The O.C
- 14) Hannah Ashworth
- 15) Robert De Niro
- 16) Lionel Richie
- 17) The Vampire Slayer
- 18) Jessica Simpson
- 19) Eminem
- 20) Luke Skywalker
- 21) Heath Ledger
- 22) Amy Winehouse
- 23) No Doubt
- 24) Johnny Depp
- 25) Eddie Murphy

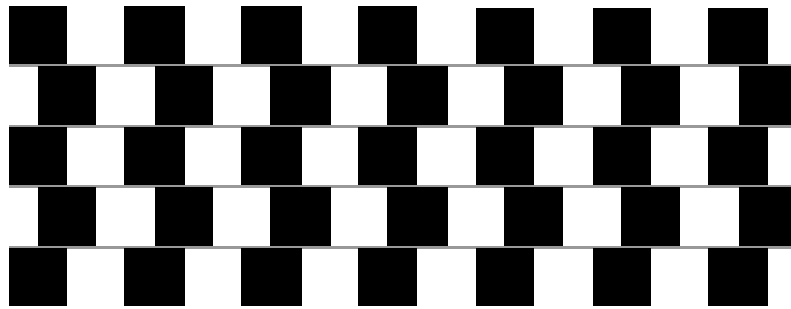
**On the next pages there are some visual illusions – can you work them out?**



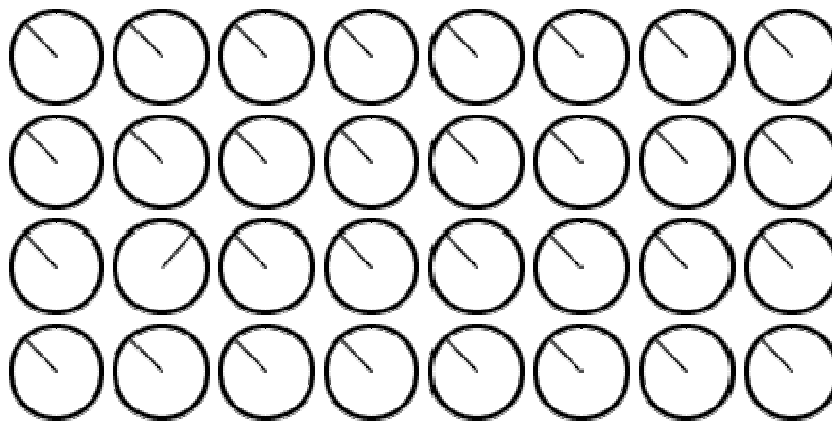
Read the line across and then down: A-B-C or 12-13-14?



What can you see?



Are the horizontal lines parallel?



Can you quickly spot the faulty read-out?

Look at the chart and say the COLOUR not the word

|        |        |        |
|--------|--------|--------|
| YELLOW | BLUE   | ORANGE |
| BLACK  | RED    | GREEN  |
| PURPLE | YELLOW | RED    |
| ORANGE | GREEN  | BLACK  |
| BLUE   | RED    | PURPLE |
| GREEN  | BLUE   | ORANGE |

**Left - Right Conflict**

Your right brain tries to say the colour but  
your left brain insists on reading the word.

You should see a man's face and also a word...



Hint: Try tilting your head to the right, the word begins with 'L'

Can you find the artists in the box below?

## Pop Search

```

R N J H T K J K U L T G Q F Y X L B X X
A E S Q Y C W L M R Y V P A W F R I Z N
G V Z L X E I H T K Q S L X Y F M E R E
H F I G W X Q L Y Z T P O U G U O D A R
A E C X S B U S T E D A S E M Z D U I D
V R W T X N H X L L F N S Z A I I B Z F
E J I J Y U H S O U T K A S T Y D E D V
W C O Q R Q W C B R H A M Z X V S H C G
D T N R O D E N W X B S G H P B E L A O
X X Y E G Y U P S N K D J A U I B Q R U
Z C I Y C J Q V B D B L U M U M A N G W
G M U H J S G M M C G C C E S Y B Y P V
O I Z E K E E X E B W E T F N X A L R T
S W H O S E M N W O R O U D R S G F W Q
Q M I S G J W I A Y H E U L K L U M Q S
D A R K N E S S N V Z Y A J B N S M H A
A F Y X W I V V N E E D H T C V J T Z R
E H Q C B N M H P T M G Q A M L B U G G
U P B R E H S U I Z D E X U I F L Y T N
B R Y C K Q G R C Q Q U I K E A E L N R

```

**BLUE**  
 BUSTED  
 COLDPLAY  
 DARKNESS  
 DIDO  
 EMINEM  
 EVANESCENCE

JAY-Z  
 KYLIE  
 NERD  
 OUTKAST  
 RAGHAV  
 SUGABABES  
 USHER

Solutions are on the next page.....

*Pop Search Solution*

```

R + + + + K + + + + + + + + Y + + + + +
A + + + Y + + + + + + + + A + + + + + N
G + + L + + + + + + + + L + + + + + E
H + I + + + + + + + + P + + + + + O + + R
A E + + + B U S T E D + + + + + D + + D
V + + + + + + + + L + + + + + I + + +
E + + + + + + + O U T K A S T + D + + +
+ C + + + + + C + + + + + + + + S + + +
+ + N + + + + + + + + + + + + E + + +
+ + + E + + + + + + + + + + + + B + + +
+ + + + C + + + + + + + + + + + + A + + +
+ + + + + S + + + + + + + + + + + + B + + +
+ + + + + E E + + + + + E + + + + + A + + +
+ + + + + + M N + + + + + U + + + G + + +
+ + + + + + + I A + + + + + L + + + U + + +
D A R K N E S S N V Z Y A J B + S + + +
+ + + + + + + + E E + + + + + + + + +
+ + + + + + + + M + + + + + + + + +
+ + + R E H S U + + + + + + + + + + +
+ + + + + + + + + + + + + + + + +

```

BLUE  
 BUSTED  
 COLDPLAY  
 DARKNESS  
 DIDO  
 EMINEM  
 EVANESCENCE

JAY-Z  
 KYLIE  
 NERD  
 OUTKAST  
 RAGHAV  
 SUGABABES  
 USHER

**Normality and Homogeneity of Variance statistics (untransformed variables; Time 1)**

| Variable                       |              | Skew   | SE   | Z score       | Kurtosis | SE    | Z score      | Levene statistic | Levene probability |
|--------------------------------|--------------|--------|------|---------------|----------|-------|--------------|------------------|--------------------|
| <b>Intention</b>               | Intervention | -2.256 | .330 | <b>-6.836</b> | 5.123    | 0.650 | <b>7.882</b> | .013             | .909               |
|                                | Control      | -2.207 | .274 | <b>-8.055</b> | 4.604    | 0.541 | <b>8.510</b> |                  |                    |
| <b>Attitude</b>                | Intervention | -1.432 | .325 | <b>-4.406</b> | 1.772    | 0.639 | 2.773        | 1.023            | .314               |
|                                | Control      | -.786  | .261 | -3.011        | -.402    | 0.517 | -0.778       |                  |                    |
| Belief                         | Intervention | -.024  | .327 | -0.073        | -.482    | 0.644 | -0.748       | 1.202            | .275               |
|                                | Control      | -.141  | .263 | -0.536        | -.191    | 0.520 | -0.367       |                  |                    |
| <b>Perceived vulnerability</b> | Intervention | -1.228 | .316 | <b>-3.886</b> | .729     | 0.623 | 1.170        | 4.408            | <b>.038</b>        |
|                                | Control      | -1.979 | .260 | <b>-7.612</b> | 3.220    | 0.514 | <b>6.266</b> |                  |                    |
| <b>Subjective norm</b>         | Intervention | -.875  | .319 | -2.743        | -.068    | 0.628 | -0.108       | 1.846            | .176               |
|                                | Control      | -1.598 | .261 | <b>-6.123</b> | 2.823    | 0.517 | <b>5.460</b> |                  |                    |
| Descriptive norm               | Intervention | -.466  | .316 | -1.475        | .207     | 0.623 | 0.332        | 1.790            | .183               |
|                                | Control      | -.356  | .261 | -1.364        | -.328    | 0.517 | -0.634       |                  |                    |
| <b>PBC</b>                     | Intervention | -1.349 | .316 | <b>-4.269</b> | 2.309    | 0.623 | <b>3.706</b> | .100             | .753               |
|                                | Control      | -.628  | .261 | -2.406        | -.695    | 0.517 | -1.344       |                  |                    |
| <b>Self-Efficacy</b>           | Intervention | -1.396 | .319 | <b>-4.376</b> | 2.023    | 0.628 | 3.221        | .392             | .532               |
|                                | Control      | -.530  | .261 | -2.031        | -.837    | 0.517 | -1.619       |                  |                    |
| Obtain condoms                 | Intervention | -.624  | .311 | -2.006        | -.306    | 0.613 | -0.499       | .772             | .381               |
|                                | Control      | -.614  | .261 | -2.352        | -.361    | 0.517 | -0.698       |                  |                    |
| <b>Discuss condoms</b>         | Intervention | -.570  | .311 | -1.833        | -.714    | 0.613 | -1.165       | .559             | .456               |
|                                | Control      | -.959  | .261 | <b>-3.674</b> | -.164    | 0.517 | -0.317       |                  |                    |
| Condom use skill               | Intervention | -.978  | .316 | -3.095        | -.197    | 0.623 | -0.316       | 2.493            | .117               |
|                                | Control      | -.811  | .264 | -3.072        | .009     | 0.523 | 0.017        |                  |                    |
| Communication                  | Intervention | -.557  | .319 | -1.746        | -.601    | 0.628 | -0.957       | .000             | .989               |
|                                | Control      | -.215  | .263 | -0.817        | -.897    | 0.520 | -1.725       |                  |                    |
| <b>Knowledge</b>               | Intervention | -.339  | .316 | -1.073        | .040     | .623  | 0.064        | .527             | .469               |
|                                | Control      | -.878  | .263 | <b>3.301</b>  | .528     | .520  | 1.015        |                  |                    |

Note. Variables in bold indicate a z-score in excess of 3.29 ( $p < 0.001$ ). PBC = perceived behavioural control. SE = standard error



**Normality and Homogeneity of Variance statistics (untransformed variables; Time 2)**

| Variable                       |              | Skew   | SE   | Z score        | Kurtosis | SE   | Z score       | Levene statistic | Levene probability |
|--------------------------------|--------------|--------|------|----------------|----------|------|---------------|------------------|--------------------|
| <b>Intention</b>               | Intervention | -1.806 | .314 | <b>-5.752</b>  | 2.428    | .618 | <b>3.929</b>  | 1.394            | .240               |
|                                | Control      | -2.399 | .266 | <b>-9.019</b>  | 5.152    | .526 | <b>9.795</b>  |                  |                    |
| <b>Attitude</b>                | Intervention | -.687  | .319 | -2.154         | -.769    | .628 | -1.225        | .766             | .383               |
|                                | Control      | -1.027 | .260 | <b>-3.950</b>  | .430     | .514 | 0.837         |                  |                    |
| Belief                         | Intervention | -.240  | .316 | -0.759         | -.456    | .623 | -0.732        | .065             | .799               |
|                                | Control      | .052   | .261 | 0.199          | -.970    | .517 | -1.876        |                  |                    |
| <b>Perceived vulnerability</b> | Intervention | -1.401 | .311 | <b>-4.505</b>  | 1.455    | .613 | 2.374         | 2.651            | .106               |
|                                | Control      | -2.745 | .260 | <b>-10.558</b> | 8.120    | .514 | <b>15.798</b> |                  |                    |
| <b>Subjective norm</b>         | Intervention | -1.136 | .319 | <b>-3.561</b>  | .647     | .628 | 1.030         | 7.161            | <b>.008</b>        |
|                                | Control      | -.743  | .261 | -2.847         | -.547    | .517 | -1.058        |                  |                    |
| Descriptive norm               | Intervention | -.146  | .311 | -0.469         | -.067    | .613 | -0.109        | .052             | .820               |
|                                | Control      | -.486  | .261 | -1.862         | .108     | .517 | 0.209         |                  |                    |
| PBC                            | Intervention | -.702  | .314 | -2.236         | -.577    | .618 | -0.934        | 1.175            | .280               |
|                                | Control      | -.843  | .260 | -3.242         | -.159    | .514 | -0.309        |                  |                    |
| <b>Self-Efficacy</b>           | Intervention | -.756  | .319 | -2.370         | -.517    | .628 | -0.823        | .027             | .870               |
|                                | Control      | -.878  | .261 | <b>-3.364</b>  | -.314    | .517 | -0.607        |                  |                    |
| Obtain condoms                 | Intervention | -.384  | .314 | -1.223         | -.738    | .618 | -1.194        | .000             | .993               |
|                                | Control      | -.823  | .261 | -3.153         | -.381    | .517 | -0.737        |                  |                    |
| <b>Discuss condoms</b>         | Intervention | -.848  | .316 | -2.684         | .074     | .623 | 0.119         | .007             | .934               |
|                                | Control      | -.929  | .261 | <b>-3.559</b>  | -.137    | .517 | -0.265        |                  |                    |
| <b>Condom use skill</b>        | Intervention | -.612  | .314 | -1.949         | -.590    | .618 | -0.955        | 5.362            | <b>.022</b>        |
|                                | Control      | -1.244 | .260 | <b>-4.785</b>  | 1.398    | .514 | 2.720         |                  |                    |
| Communication                  | Intervention | -.690  | .325 | -2.123         | -.008    | .639 | -0.013        | 1.240            | .261               |
|                                | Control      | -.745  | .261 | -2.854         | .090     | .517 | 0.174         |                  |                    |
| <b>Knowledge</b>               | Intervention | -1.238 | .316 | <b>-3.918</b>  | 3.076    | .623 | <b>4.937</b>  | .429             | .513               |
|                                | Control      | -1.630 | .264 | <b>-6.174</b>  | 3.129    | .523 | <b>5.983</b>  |                  |                    |

Note. Variables in bold indicate a z-score in excess of 3.29 ( $p < 0.001$ ). PBC = perceived behavioural control. SE = standard error

**Normality and Homogeneity of Variance statistics (transformed variables; Time 1)**

| Variable                            |              | Skewness | SE   | Z score       | Kurtosis | SE   | Z score | Levene statistic | Levene sig. level |
|-------------------------------------|--------------|----------|------|---------------|----------|------|---------|------------------|-------------------|
| Intention                           | Intervention | -1.244   | .330 | <b>-3.770</b> | -.112    | .650 | -0.172  | .092             | .762              |
|                                     | Control      | -1.343   | .274 | <b>-4.901</b> | .167     | .541 | 0.309   |                  |                   |
| Attitude                            | Intervention | .021     | .325 | 0.065         | -1.114   | .639 | -1.743  | .501             | .480              |
|                                     | Control      | -.004    | .261 | -0.015        | -1.507   | .517 | -2.915  |                  |                   |
| Perceived vulnerability             | Intervention | -.357    | .316 | -1.130        | -1.519   | .623 | -2.438  | 1.203            | .275              |
|                                     | Control      | -.747    | .260 | -2.873        | -1.045   | .514 | -2.033  |                  |                   |
| Subjective norm                     | Intervention | -.083    | .319 | -0.260        | -1.616   | .628 | -2.573  | .000             | .986              |
|                                     | Control      | -.179    | .261 | -0.686        | -1.376   | .517 | -2.662  |                  |                   |
| PBC                                 | Intervention | .305     | .316 | 0.965         | -1.204   | .623 | -1.933  | .747             | .389              |
|                                     | Control      | .150     | .261 | 0.575         | -1.582   | .517 | -3.06   |                  |                   |
| Self Efficacy                       | Intervention | .065     | .319 | 0.204         | -1.319   | .628 | -2.1    | .443             | .507              |
|                                     | Control      | .299     | .261 | 1.146         | -1.458   | .517 | -2.82   |                  |                   |
| Discuss condoms                     | Intervention | .463     | .311 | 1.489         | -1.529   | .613 | -2.494  | .400             | .528              |
|                                     | Control      | .054     | .261 | 0.207         | -1.609   | .517 | -2.915  |                  |                   |
| Condom use skill                    | Intervention | .101     | .316 | 0.320         | -1.598   | .623 | -2.565  | 2.169            | .143              |
|                                     | Control      | .449     | .264 | 1.701         | -1.294   | .523 | -2.474  |                  |                   |
| Knowledge (reflect and square root) | Intervention | -0.316   | .316 | -1            | -0.002   | .623 | 0.003   | .008             | .930              |
|                                     | Control      | .279     | .263 | 1.061         | -0.38    | .52  | 0.731   |                  |                   |

Note. Variables in bold indicate a z-score in excess of 3.29 ( $p < 0.001$ ). PBC = perceived behavioural control. SE = standard error. The variables belief, descriptive norm, intention to obtain condoms and communication about condoms were not transformed and thus not presented in this table. All variables transformed using reflect and inverse except where stated.

**Normality and Homogeneity of Variance statistics (transformed variables; Time 2)**

| Variable                                   |              | Skewness | SE   | Z score       | Kurtosis | SE   | Z score | Levene statistic | Levene sig. level |
|--|--------------|----------|------|---------------|----------|------|---------|------------------|-------------------|
| <b>Intention</b>                           | Intervention | -.866    | .314 | -2.758        | -.966    | .618 | -1.563  | 3.379            | .068              |
|  | Control      | -1.436   | .266 | <b>-5.398</b> | .389     | .526 | 0.740   |                  |                   |
| Attitude                                   | Intervention | -.103    | .319 | -0.323        | -1.691   | .628 | -2.693  | 4.772            | .031              |
|  | Control      | .006     | .260 | 0.023         | -1.290   | .514 | -2.510  |                  |                   |
| Perceived vulnerability                    | Intervention | -.599    | .311 | -1.926        | -1.420   | .613 | -2.316  | 4.017            | .047              |
|  | Control      | -1.066   | .260 | <b>-4.100</b> | -.398    | .514 | -0.774  |                  |                   |
| Subjective norm                            | Intervention | -.076    | .319 | -0.238        | -1.597   | .628 | -2.543  | 4.008            | .047              |
|  | Control      | -.050    | .261 | -0.192        | -1.540   | .517 | -2.979  |                  |                   |
| PBC  | Intervention | .238     | .314 | 0.758         | -1.406   | .618 | -2.275  | .347             | .556              |
|  | Control      | -.027    | .260 | -0.104        | -1.608   | .514 | -3.128  |                  |                   |
| Self Efficacy                              | Intervention | .062     | .319 | 0.194         | -1.583   | .628 | -2.521  | .252             | .616              |
|  | Control      | -.045    | .261 | -0.172        | -1.612   | .517 | -3.118  |                  |                   |
| Discuss condoms                            | Intervention | -.103    | .316 | -0.326        | -1.656   | .623 | -2.658  | .000             | .990              |
|  | Control      | .024     | .261 | 0.092         | -1.698   | .517 | -3.284  |                  |                   |
| Condom use skill                           | Intervention | .311     | .314 | 0.990         | -1.671   | .618 | -2.704  | 2.661            | .105              |
|  | Control      | .068     | .260 | 0.262         | -1.575   | .514 | -3.064  |                  |                   |
| <b>Knowledge</b> (reflect and square root) | Intervention | .346     | .316 | 1.095         | .434     | .623 | 0.697   | .893             | .396              |
|  | Control      | .933     | .264 | <b>3.534</b>  | .721     | .523 | 1.379   |                  |                   |

Note. Variables in bold indicate a z-score in excess of 3.29 ( $p < 0.001$ ). PBC = perceived behavioural control. SE = standard error. The variables belief, descriptive norm, intention to obtain condoms and communication about condoms were not transformed and thus not presented in this table. All variables transformed using reflect and inverse except where stated.

**Normality and Homogeneity of Variance statistics (untransformed variables (steady partner items); Time 1)**

| Variable             |              | Skew   | SE   | Z score       | Kurtosis | SE   | Z score      | Levene statistic | Levene probability |
|----------------------|--------------|--------|------|---------------|----------|------|--------------|------------------|--------------------|
| <b>Intention</b>     | Intervention | -1.093 | .319 | <b>-3.426</b> | -.279    | .628 | -0.444       | 5.890            | <b>.017</b>        |
|                      | Control      | -1.492 | .267 | <b>-5.588</b> | .897     | .529 | 1.695        |                  |                    |
| <b>Attitude</b>      | Intervention | -.663  | .311 | -2.131        | -.870    | .613 | -1.419       | 8.560            | <b>.004</b>        |
|                      | Control      | -1.375 | .260 | <b>-5.288</b> | 1.054    | .514 | 2.050        |                  |                    |
| Descriptive Norm     | Intervention | -.434  | .314 | -1.382        | -.514    | .618 | -0.831       | 2.303            | .132               |
|                      | Control      | -.222  | .261 | -0.850        | -1.153   | .517 | -2.230       |                  |                    |
| <b>PBC</b>           | Intervention | -1.194 | .311 | <b>-3.839</b> | .288     | .613 | 0.469        | 9.083            | <b>.003</b>        |
|                      | Control      | -1.514 | .261 | <b>-5.800</b> | 2.104    | .517 | <b>4.069</b> |                  |                    |
| <b>Self-Efficacy</b> | Intervention | -1.072 | .311 | <b>-3.446</b> | -.013    | .613 | -0.021       | 10.506           | <b>.002</b>        |
|                      | Control      | -1.545 | .261 | <b>-5.919</b> | 1.894    | .517 | <b>3.663</b> |                  |                    |
| Subjective norm      | Intervention | -.925  | .316 | -2.927        | -.447    | .623 | -0.717       | 1.758            | .187               |
|                      | Control      | -.974  | .263 | <b>-3.703</b> | .116     | .520 | 0.223        |                  |                    |
| <b>Communication</b> | Intervention | -.831  | .319 | -2.605        | -.249    | .628 | -0.396       | .542             | .463               |
|                      | Control      | -1.384 | .263 | <b>-5.262</b> | 1.187    | .520 | 2.282        |                  |                    |

Note. Variables in bold indicate a z-score in excess of 3.29 ( $p < 0.001$ ). PBC = perceived behavioural control. SE = standard error

**Normality and Homogeneity of Variance statistics (untransformed variables (steady partner items): Time 2)**

| Variable             |              | Skew   | SE   | Z score       | Kurtosis | SE   | Z score      | Levene statistic | Levene probability |
|----------------------|--------------|--------|------|---------------|----------|------|--------------|------------------|--------------------|
| <b>Intention</b>     | Intervention | -.814  | .311 | -2.617        | -.749    | .613 | -1.222       | .937             | .335               |
|                      | Control      | -1.238 | .264 | <b>-4.689</b> | .323     | .523 | 0.618        |                  |                    |
| <b>Attitude</b>      | Intervention | -1.409 | .314 | <b>-4.487</b> | 1.440    | .618 | 2.330        | .247             | .620               |
|                      | Control      | -1.520 | .261 | <b>-5.824</b> | 1.452    | .517 | 2.809        |                  |                    |
| Descriptive Norm     | Intervention | -.521  | .309 | -1.686        | -.545    | .608 | -0.896       | 2.075            | .152               |
|                      | Control      | -.380  | .261 | -1.456        | -1.062   | .517 | -2.054       |                  |                    |
| <b>PBC</b>           | Intervention | -1.306 | .309 | <b>-4.227</b> | .651     | .608 | 1.071        | 9.467            | <b>.003</b>        |
|                      | Control      | -1.555 | .260 | <b>-5.981</b> | 2.287    | .514 | <b>4.449</b> |                  |                    |
| <b>Self-Efficacy</b> | Intervention | -.900  | .314 | -2.866        | -.085    | .618 | -0.138       | .762             | .384               |
|                      | Control      | -1.560 | .261 | <b>-5.977</b> | 1.603    | .517 | 3.101        |                  |                    |
| Subjective norm      | Intervention | -1.045 | .316 | <b>-3.307</b> | .191     | .623 | 0.307        | 2.977            | 0.87               |
|                      | Control      | -1.119 | .261 | <b>-4.287</b> | .998     | .517 | 1.930        |                  |                    |
| <b>Communication</b> | Intervention | -.931  | .316 | -2.946        | -.246    | .623 | -0.395       | 6.125            | .015               |
|                      | Control      | -1.621 | .261 | <b>-6.211</b> | 2.253    | .517 | <b>4.358</b> |                  |                    |

Note. Variables in bold indicate a z-score in excess of 3.29 ( $p < 0.001$ ). PBC = perceived behavioural control. SE = standard error

**Normality and Homogeneity of Variance statistics (transformed variables (steady partner items); Time 1)**

| Variable        |              | Skew  | SE   | Z score       | Kurtosis | SE   | Z score |
|-----------------|--------------|-------|------|---------------|----------|------|---------|
| Intention       | Intervention | -.412 | .319 | -1.292        | -1.681   | .628 | -2.677  |
|                 | Control      | -.967 | .267 | <b>-3.622</b> | -.931    | .529 | -1.760  |
| Attitude        | Intervention | .013  | .311 | 0.042         | -1.885   | .613 | -3.075  |
|                 | Control      | -.586 | .260 | -2.254        | -1.493   | .514 | -2.905  |
| PBC             | Intervention | -.293 | .311 | -0.942        | -1.749   | .613 | -2.853  |
|                 | Control      | -.651 | .261 | -2.494        | -1.422   | .517 | -2.750  |
| Self-Efficacy   | Intervention | -.219 | .311 | -0.704        | -1.798   | .613 | -2.933  |
|                 | Control      | -.757 | .261 | -2.900        | -1.278   | .517 | -2.472  |
| Subjective norm | Intervention | .140  | .316 | 0.443         | -1.378   | .623 | -2.212  |
|                 | Control      | .080  | .263 | 0.304         | -1.612   | .520 | -3.100  |
| Communication   | Intervention | .158  | .319 | 0.495         | -1.610   | .628 | -2.564  |
|                 | Control      | -.346 | .263 | -1.316        | -1.456   | .520 | -2.800  |

Note. PBC = perceived behavioural control. SE = standard error

**Normality and Homogeneity of Variance statistics (transformed variables (steady partner items); Time 2)**

| Variable        |              | Skew  | SE   | Z score | Kurtosis | SE   | Z score |
|-----------------|--------------|-------|------|---------|----------|------|---------|
| Intention       | Intervention | -.226 | .311 | -0.727  | -1.882   | .613 | -3.070  |
|                 | Control      | -.560 | .264 | -2.121  | -1.569   | .523 | -3.000  |
| Attitude        | Intervention | -.449 | .314 | -1.430  | -1.640   | .618 | -2.654  |
|                 | Control      | -.722 | .261 | -2.766  | -1.314   | .517 | -2.542  |
| PBC             | Intervention | -.501 | .309 | -1.621  | -1.616   | .608 | -2.658  |
|                 | Control      | -.583 | .260 | -2.242  | -1.479   | .514 | -2.877  |
| Self-Efficacy   | Intervention | -.094 | .314 | -0.299  | -1.853   | .618 | -2.998  |
|                 | Control      | -.776 | .261 | -2.973  | -1.225   | .517 | -2.369  |
| Subjective norm | Intervention | .032  | .316 | 0.101   | -1.669   | .623 | -2.679  |
|                 | Control      | .258  | .261 | 0.989   | -1.445   | .517 | -2.795  |
| Communication   | Intervention | .066  | .316 | 0.209   | -1.619   | .623 | -2.599  |
|                 | Control      | -.442 | .261 | -1.693  | -1.397   | .517 | -2.702  |

Note. PBC = perceived behavioural control. SE = standard error

### **Condom skills training intervention**

#### **Exercise Length and Audience**

Approximately 20 minutes, with 25 students.

#### **Materials needed**

25 standard condoms (one for each student in the class);  
Samples of alternative types of condoms such as flavoured and ribbed;  
25 lubrication information leaflets;  
10 demonstrators;  
Tissues/baby wipes.

#### **Introduce the exercise**

We're going to go through the steps of what you should do to use a condom correctly. You may have done this before – either the real thing or a demonstration, but we are going to go through it now as it's really important.

Ask class the following questions:

##### **“Why do we use condoms?”**

Reduces the risk of pregnancy  
Reduces the risk of sexually transmitted infections including HIV

##### **“What are other advantages of using condoms?”**

Reduces risk of a woman developing cervical cancer  
Helps some men sustain an erection for longer  
Reduces feelings of anxiety about pregnancy, STIs and HIV

##### **“Are condoms reliable?”**

Yes condoms are 98% reliable if used correctly. Condom failure often happens because people don't know how to use them properly – so today we are going to have a look at how to use them correctly.

Hand out a standard condom so each student has a condom in front of them.

#### **Types of Condoms**

There are lots of different condoms available: (Hold up packets for students to see when you are describing each condom)

- 1) **Standard:** This is the standard condom available and is not flavoured.
- 2) **Flavoured:** such as mint, blueberry and strawberry. Flavoured condoms were designed to be used for oral sex as they taste nicer, but they can also be used for vaginal and anal sex.
- 3) **Ribbed/dotted:** These are condoms which are shaped slightly differently, e.g., grooves on, dots on.

There are lots of different types of condoms available and which you use depends on personal preference.

#### **Condom Size**

Condoms are very stretchy and therefore the majority of men can comfortably fit the average condom! (You can demonstrate this by putting condom over your hand/arm).



However, wearing a condom is a bit like finding a pair of shoes, some fit better than others. It is best to try a few condoms and find which fits best.

### **Lubricants**

Only *water* based lubricants should be used with condoms. Oil based lubricants, such as baby oil can break the condoms within four minutes of use and should not be used. Illustrate this by blowing up a condom and putting on a few drops of baby oil. Ask students to suggest other sources of oil based lubricants. (Ensure you have covered common oil based products: e.g., lipstick, Vaseline, baby & massage oil, sun-cream, cocoa butter, ice-cream). Provide information about appropriate water based lubricants, such as KY jelly and the condom manufacturers lubricants such as Durex 'play' and Pasante sashes.

Now begin the condom demonstration.

### **Explain why you are doing a condom demonstration.**

"We are going to do a condom demonstration now because knowing how to use a condom properly reduces the likelihood of condom breakages".

### **Condom Demonstration**

Ask students: "Ok. Can someone tell me what to do first. Who knows what you should check for on a condom packet?"

- British kite mark (looks like a little heart) and European CE sign. All condoms with these marks on can be used safely for penetrative sex (i.e., vaginal or anal sex).
- Expiry date. All condoms should have a "use by" date after which the rubber may start to weaken. Make sure you use a condom that is in date!  
Check that students can all see the kite mark and expiry date on the condom packet.
- Also check that the packet not obviously damaged which may have happened if it has been in your back pocket for a while.
- Open packet: Be careful if wearing jewellery or sharp nails
- Explain that it is important to be careful when opening the packet so as not to rip the contents (move the condom to one side in the packet, open the packet using the 'jagged' side, use fingers and not teeth to avoid damaging the condom);

Encourage students to talk you through what happens next:

- Make sure condom is not inside out. You can do this by laying it flat on your hand and checking the ridges/wrinkles are on the outside. The teat should also poke up. (Demonstrate this by laying the condom flat on the palm of your hand).
- Demonstrate what happens if a condom is put on the wrong way round, i.e., the condom starts to roll back up the demonstrator and won't roll all the way down. If you realise that the condom is the wrong way round after you've put it on, should you just take it off and roll it down the right way? (Ask this to the class). The answer is No. If it is the wrong way round throw it away and start again as there could be pre-cum, i.e., men release a small amount of semen before ejaculating which will contain sperm;
- Penis must be erect (hard) before putting the condom on - put the condom on before sexual contact – this is important because fluid which contains sperm can leak from the penis when a man is aroused

- Squeezing the teat, exclude air until condom is fully unrolled down the demonstrator. This ensures that air is not trapped in the condom, which make it more likely to tear and makes space for the semen;
- You can put on some *water* based lubricant at this point over the condom. Penis is now dressed for intercourse!
- Withdraw as soon as man has ejaculated before penis goes soft (as this will cause semen to spill out of the condom), holding base of condom so the condom doesn't slip off and semen does not leak out;
- Tie a knot in the condom after demonstration and check it for any splits;
- Disposal- Wrap condom in tissue and put in bin, do not flush down the toilet as it might wrap around the u-bend causing toilet to break or end up in the sea!
- Use another condom for further sexual contact. Never reuse a condom.

### **Students now do demonstration**

Does anyone have any questions?

Split class up into twos or threes. Hand out demonstrators to make sure each group has a demonstrator and a condom each. Ask groups to demonstrate using a condom to each other.

### **Rounding off the discussion**

Discuss what to do if a condom splits during sex and ensure that the group knows about EHC (emergency hormonal contraception) and how and where to access it and where sexual health services are located.

### **Where can you get condoms from?**

Ask students to generate answers.

**Free:** Young people's sexual health clinics and family planning clinics

**To buy:** Supermarket, machines in toilets, chemist, corner shop, garage etc. Remember to make sure they have the British Kitemark or CE mark

Do keep some condoms available – one of the main reasons people don't use condoms is because they don't have one available. Encourage students to practise using condoms so they know what they are doing when it comes to the real thing.



**Consultancy Plan and Timescale (version 1)**  
**Formulated October, 2005; due for revision July, 2006**

October and November, 2005

- Assess request for consultancy
- Review consultancy frameworks (for example, Schein's (1999) model of Process Consultation and Block's (1987) model of Flawless Consulting)
- Literature review of evidence for young people's preferences for accessing health services
- Formulate consultancy contract

December, 2005

- Identify and meet key personnel to form the working party which will have a role as monitoring the consultancy
- Invite key personnel to first working party meeting
- Produce draft Terms of Reference for the working party

January, 2006

- First working party meeting: Aim to agree Terms of Reference, membership of the working party and dates of future meetings.

February, 2006

- Identify and invite professionals identified at the first meeting as being appropriate to be part of the working party who were not already members
- Investigate options of involving young people in the project
- Review different models of young people friendly standards by investigating national guidance and good practice

March, 2006

- Second working party meeting: Aim to agree the young people friendly criteria and the type of young people friendly model for services to be used (i.e., should criteria be either 'essential' or 'desirable' and should there be different levels of award, i.e., 'bronze, silver or gold').

April, 2006

- Third working party meeting: Aim to decide how to measure criteria and reward success
- Produce toolkit for services outlining each of the young people friendly criteria and model to be used
- Consult with young people to get their views on the criteria selected by 'adult' working party

May, 2006

- Fourth working party meeting: Aim to decide how to publicise the initiative to services and young people and agree which services will be the pilot sites
- Investigate methods of involving young people in consultation with the youth service
- Update toolkit in line with feedback from the working party members
- Develop an accreditation process for a service wishing to obtain young people friendly award

June, 2006

- Meet with the communication team and agree communication strategy
- Design review questionnaire to be used on an annual basis for services who have received the award to assess their development
- Arrange launch for pilot sites
- Produce a pack to support services achieve the criteria

July, 2006

- Fifth working party meeting: Launch to celebrate the work of the working party and the pilot stage of the project
- Review meeting with primary client to monitor progress of consultancy  
Begin work with pilot sites in terms of evidence collection to meet the young people friendly standards

August – December, 2006

- Work with young people and the communications team to produce young people friendly logo that will be used to signify to young people that the service has been awarded young people friendly status.

**Revised Consultancy Plan and Timescale (version 2)**

**Date plan formulated August, 2006; due for revision January, 2007**

August, 2006

- Briefing sent to Local Medicines Committee to obtain clarification for under 16s seeking confidential sexual health advice from GPs

October, 2006

- Sixth working party meeting: Update from services on progression of the pilot
- Consultation with young people
- Pilot pack revised after feedback

November, 2006

- Competition for young people to design logo to be used to 'badge' services
- Services to self-assess against criteria and produce action plan

January, 2007

- Selection of logo
- Design of associated publicity materials
- Working party meeting to establish progress of pilots (*subsequently cancelled*)

April, 2007

- Services complete self-assessment and action plan

N.B. Several factors affected the progression of the consultancy during the period end 2006 – Autumn, 2007, which included my experiencing a family bereavement which led to suspension of Stage 2 (October, 2006 – December, 2007). In addition, the PCT was aware of discussions taking place at a national level by Department of Health of the development of a national toolkit and associated publicity materials, including a national logo. It was thus agreed to abandon the plan to develop local publicity. The consultancy plan and timescale was renegotiated at the outset of the Department of Health pilot period October 2007 – April 2008.

**Revised Consultancy Plan and Timescale (version 3)**

**Date plan formulated October 2007 – April, 2008**

October 2007

- Seventh working party meeting
- Launch of the Department of Health pilot
- Presentation for the Teenage Pregnancy Strategy Group

November 2007

Engage 6 services with the project as outlined in the DH criteria:

- ❖ 2 GP practices
- ❖ Sexual or reproductive health service
- ❖ Specialist CAMHS service
- ❖ Local abortion providers (both NHS and independent under NHS contract)
- ❖ Health service provided in youth or extended service setting

December 2007

- Assist services to complete self-assessment toolkit
- Maintain regular contact to ensure services meet the January, 2008 deadline for submissions to DH

January 2008

- Submit interim report to DH to include all self-assessments and feedback questionnaires from services
- Recruit young people for the project to be trained by the peer assessors
- Presentation for the Be Healthy Meeting
- Deliver training to receptionists at one of the GP pilot sites

February 2008

- Presentation to the Sexual Health Strategy Group
- Distribute flyers to young people in schools to recruit as trained assessors

March 2008

- Prepare for workshop launch on 24<sup>th</sup> April
- Ground work for roll out of you're welcome (for example, meet with sexual health commissioner)
- Write final report for DH
- Begin work on developing action plan for You're Welcome for 2008/2009
- Ensure pilot money awarded is transferred from DH

### **CONSULTANCY CONTRACT (Version 1)**

**Customer Lead (Client):** XXXX (Service Development Manager - Children and Young People's Services, Westminster PCT)

**Project Lead (Consultant):** Antonia Rich (Young People's Sexual Health Development Worker, Trainee Health Psychologist, Westminster PCT)

**Project Name:** Implementation of "You're Welcome Quality Criteria: Making Health Services Young People Friendly" (Department of Health, 2005).

**Contract start date:** November, 2005

**Review date:** July, 2006

**Contract end date:** January, 2007 (revised to September, 2007)

#### **1. PURPOSE**

Westminster PCT wishes to implement the "You're Welcome" (Department of Health, 2005) guidance to develop a young people friendly accreditation scheme for NHS services (sexual health clinics, contraceptive services and GP practices), in order to increase their accessibility to young people. The initiative is part of the Trust's Teenage Pregnancy Strategy, Sexual Health Strategy and the Children and Young People's Plan. The latter is a 3 year plan held jointly between Westminster PCT and the local authority, Westminster City Council. This initiative is part of a number of activities designed to reduce the number of teenage pregnancies and sexually transmitted infections in young people in Westminster.

#### **2. OBJECTIVES OF THE CONSULTANCY**

1. Establish and co-ordinate a multi-agency working party comprising relevant professionals to oversee the project
2. Develop a set of young people friendly criteria, based on "You're Welcome" guidance, which services will need to attain in order to be accredited with young people friendly status appropriate to the needs of young people in Westminster PCT
3. Develop methods of user involvement by engaging young people in the project
4. Develop the "quality accreditation process", i.e., the process a service will need to go through to receive accreditation of the young people friendly award.
5. Initiate and oversee the pilot stage of the project by supporting primary care sites and young people's sexual health clinics in Westminster (a minimum of 3 sites to be involved in the pilot)
6. Develop a "pilot pack" consisting of relevant documentation and materials for services wishing to submit for "You're Welcome" status
7. Provide ongoing support during the pilot stage in order for services to meet the young people friendly criteria, for example, delivering training, developing and providing health promotion materials and locating appropriate advice and guidance
8. Design of the Young People Friendly logo. This will involve working closely with WPCT communications department.
9. Evaluate the project. This will involve developing an appropriate mechanism for evaluating the service against the young people friendly criteria. Young people's views will be included in the evaluation.

#### **3. OUTCOME CRITERIA**

1. Maintain effective working relationships with professionals in the working party
2. Engagement with young people
3. Development of the young people friendly criteria and documentation which services would complete as part of the scheme
4. Engagement and implementation of the pilot sites
5. Evaluation of the pilots



#### **4. COSTS**

Consultancy Costs: Payment for the consultancy will be covered under the employment contract for Antonia Rich who is employed as Young People's Sexual Health Development Worker at WPCT.

Project Budget: No budget has been granted for the project however it is possible to obtain funds of £1,500 from the Teenage Pregnancy Budget.

#### **5. MONITORING THE CONSULTANCY**

The consultancy will be monitored by working party meetings and regular meetings between Antonia Rich and the client, XXXX. This contract will be reviewed in July, 2006.

#### **6. EVALUATION OF THE CONSULTANCY**

The consultancy will be evaluated at the end of the pilot stage before expected roll out to other PCT sites.

#### **7. TIME-SCALE**

Please see attached timetable.

#### **8. SIGNATURES**

.....  
Antonia Rich, Young People's Sexual Health Development Worker, Westminster Primary Care Trust

.....  
XXXX, Service Development Manager - Children and Young People's Services, Westminster Primary Care Trust

## CONSULTANCY CONTRACT (Version 2)

**Customer Lead (Client):** XXXX (Service Development Manager - Children and Young People's Services, Westminster PCT)

**Project Lead (Consultant):** Antonia Rich (Health Improvement Specialist: Young people's sexual health)

**Project Name:** Implementation of the "You're Welcome" Westminster pilot for the Department of Health

**Contract start date:** October, 2007

**Contract end date:** April, 2008

### 1. PURPOSE

The Department of Health You're Welcome quality criteria (Department of Health, 2005) have been developed to support the implementation of standard 4 of the National Service framework for Children, Young people, and Maternity Services. You're Welcome is also expected to feature within the Children and Young People's Health Strategy with specific reference to achievements by PCTs in embedding You're Welcome into the delivery of services to young people. It is also expected to feature in the post consultation and planning for Healthcare for London. Reissued in April 2007, the criteria lay out principles to help health services – in the community and in hospitals – to be young people friendly.

Since the October 2005 launch, a range of local areas, services and professional groups have adopted and begun to apply the You're Welcome quality criteria. Variation in interpretation has been observed between localities, including between the Teenage Health Demonstration Sites which are showcasing the application of the quality criteria. The need for national moderation of application and quality assurance of You're Welcome has been identified.

### 2. OBJECTIVES OF THE CONSULTANCY

1. Identification of a number of local services to participate in a 2-3 hour self-assessment exercise, with possible follow up interview. A minimum of 6 settings are required to include:

- 2-4 primary care practices
- 1 Sexual or reproductive health service
- 1 Child and Adolescent Mental Health Service (CAMHS)
- Local abortion providers (both NHS and independent under NHS contract)
- Health service provided in youth or extended service setting

2. Support to identify young people who would welcome the opportunity to train as young assessors

3. Raise awareness of the pilot to governance structures and prepare the ground for visioning the roll out of You're Welcome

4. Support local planning of the integration of You're Welcome standards and logo into local service improvement planning, and into joint needs assessment and commissioning cycles

### 3. OUTCOME CRITERIA

A minimum of 6 self-assessments from services to be returned

A mid-term report for 14<sup>th</sup> January, 2008

Identification of local young people to be trained as assessors of services

A final report for 14<sup>th</sup> April, 2008, to include reflection on Westminster's experience of participating in the pilot and the vision for roll-out of "You're Welcome" post pilot

Participation in the You're Welcome launch in April 2008

**4. COSTS**

Consultancy Costs and Project Budget: £11,500 has been granted from Department of Health for participation in the pilot. This must be invoiced prior to end March 2008 and spent only on activities related to the You're Welcome pilot.

**5. MONITORING THE CONSULTANCY**

The consultancy will be monitored by XXXX (London regional co-ordinator) and local co-ordinator meetings organised by Government Office for London.

**6. EVALUATION OF THE CONSULTANCY**

The consultancy will be evaluated in April 2008 and documented in a final report.

**7. TIME-SCALE**

October 2007 – April 2008

**8. SIGNATURES**

.....  
Antonia Rich, Health Improvement Specialist, Young people's sexual health, Westminster  
Primary Care Trust

.....  
XXXX, Service Development Manager - Children and Young People's Services, Westminster  
Primary Care Trust

**You're Welcome Quality Criteria Working Group**  
**Minutes, 13<sup>th</sup> July 2006**

**Present:**

[REDACTED] – Service Development Manager, WPCT (Chair)  
 Antonia Rich (AR) - Young people's sexual health development worker, WPCT  
 [REDACTED] – Condom Scheme Manager, WPCT  
 [REDACTED] – Teenage Pregnancy Coordinator - WCC  
 [REDACTED] – Health Improvement Team, WPCT  
 [REDACTED] – Youth Service, User Involvement, WCC  
 [REDACTED] Health Centre  
 [REDACTED] School Nurse, WPCT  
 [REDACTED] clinic, [REDACTED]  
 [REDACTED] – Healthy Schools Co-ordinator, WPCT

**Apologies**

[REDACTED] Clinic  
 [REDACTED] School Nurse, WPCT  
 [REDACTED] – [REDACTED] Society  
 [REDACTED] Contraceptive Services

| Item  | Action   |
|---|--|
| <b>1. Review of previous minutes</b><br>AR will carry out a consultation with [REDACTED] youth club in September. [REDACTED] has carried out a consultation at [REDACTED] Society. As [REDACTED] wasn't present at the meeting, AR will telephone to find out how the consultation went.<br>AR met with [REDACTED]. It has been agreed that we will use a similar process for involving young people in providing feedback to services as the 'Peer Inspector' programme established by Westminster City Council.   | AR to do consultation in September<br><br>AR to talk to [REDACTED] |
| <b>2. Review Questionnaire</b><br>The group discussed the review questionnaire. There was discussion to the wording of item 6, 'what issues young people have raised so far and what has the service done to deal with these?' as it was felt this needed to be more specific. The word 'logo' is to be removed from item 1.  | AR to change wording of items 1&6 and circulate.                   |
| <b>3. Pilot Sites</b><br>[REDACTED] Health Centre, [REDACTED] and [REDACTED] will be the pilot sites. AR will meet with the leads [REDACTED] at the pilot sites to begin this process.  | AR to arrange meetings with pilot sites                            |
| <b>4. Communication and Publicity</b><br>[REDACTED] updated the group on a meeting with communication lead, [REDACTED]. The meeting had been productive. Due to the fact that to begin with the project will be small (e.g., only one GP practice signed up) the publicity will use a targeted approach. Publicity will begin with details of the pilot launch in Just Ten Minutes, Trust Brief and Change for Children Bulletin as the work is part of the Children and Young people's plan. A larger publicity campaign will begin with the full roll out. We will also use the intranet for WPCT and WCC.<br>Publicity with young people will again use a targeted approach to begin with (i.e., those using the pilot sites) and build up as more services are awarded. Using the Bedroom Business website to list the participating services might be useful. Also relevant magazines, youth centres, pharmacies etc.<br>[REDACTED] suggested there maybe relevant WCC publications. | [REDACTED] to investigate WCC publications.                        |
| <b>5. Design Issues</b>   | [REDACTED] to find out   |

|   |  |
|---|--|
| <p>The group felt that it would be good to ask young people to design the symbol which would be used to award services so young people recognise that a service is young people friendly. Possible ways of recruiting a young person include the youth service and school projects. ■ suggested there maybe youth services who would like to be involved. ■ suggested ■ school might be interested.</p>   | <p>whether there are any interested youth projects. ■ to find out if any schools are interested.</p> |
| <p><b>6. Pilot Packs</b><br/>AR had put together pilot packs to support services and presented these to group for feedback. The group suggested adding a contact page and an introduction to the "You're Welcome" programme to set the scene.</p>   | <p>AR to make changes to the pilot packs.</p>  |
| <p><b>7. Peer Evaluators</b><br/>The group had a discussion about possibilities for recruiting young people as evaluators. Suggestions included approaching schools for Y11 and Y12 who could then include this in their personal statements. Other possibilities include the new Learning Academy and making participation part of a QCA or ASDAN scheme of work.</p>  |  |
| <p><b>8. Launch event</b><br/>The launch event was attended by:<br/>         ■ Contraceptive Services<br/>         ■ Service Development Manager (sexual health), WPCT<br/>         ■ Head of Service Development (children, young people and maternity services), WPCT<br/>         ■ Primary Care Development Manager, WPCT<br/>         ■, Community Health Development Coordinator, WPCT</p> <ul style="list-style-type: none"> <li>• ■ introduced the event, thanking the working party and highlighted the importance of this piece of work.</li> <li>• AR gave a presentation outlining the aims, background, the You're Welcome criteria, the working party, young people involvement and future work.</li> <li>• ■ also thanked the working party and AR for all their work.</li> </ul> <p>■ made several suggestions about taking the work forward:</p> <ul style="list-style-type: none"> <li>• With practice based commissioning, reducing use of secondary care costs/activity and suggest/identify costs of YP accessing secondary care services when they could instead be accessing primary care and ensure use of cost effective, more appropriate services.</li> <li>• Liaise with PCT pharmacy team, as the project could be advertised in pharmacies directing YP to accredited services via window campaigns.</li> <li>• It was agreed that AR would send the slides to the PCDM's who will email/discuss with GP's at the locality meetings.</li> </ul> | <p>AR to email ■</p>   |
| <p><b>9. Dates of future meetings</b><br/>The date of the next meeting is Thursday, 12<sup>th</sup> October at 10am.</p> <p><b><i>The meeting will be held at:</i></b><br/>         Harrow Road Health Centre<br/>         209 Harrow Road<br/>         London W2 5EH</p>   |  |

**You're Welcome Quality Criteria Working Group**  
**Minutes, 20<sup>th</sup> September, 2007**

**Present:**

[REDACTED] – Service Development Manager, WPCT (Chair)  
 Antonia Rich (AR) - Young people's sexual health development worker, WPCT  
 [REDACTED] Condom Scheme Manager, WPCT  
 [REDACTED] Health Centre  
 [REDACTED] Health Centre  
 [REDACTED] – [REDACTED] Clinic  
 [REDACTED] clinic, [REDACTED]  
 [REDACTED] – Health Improvement Team, WPCT  
 [REDACTED] – [REDACTED] Contraceptive Services

**Apologies**

[REDACTED] – Youth Participation, WCC  
 [REDACTED] Teenage Pregnancy Co-ordinator, WCC

| Item   | Action          |
|--|-----------------|
| <p><b>1. Review of pilots</b></p> <p>[REDACTED] thanked the pilot sites for their work and for attending the meeting to review this process. Pilot sites were asked for feedback:</p> <p>1) [REDACTED] from [REDACTED]: found the criteria useful in assessing how young people friendly the clinic is overall as opposed to only the clinical staff. The training that AR and [REDACTED] delivered to receptionists was very well received and has proved to be beneficial not just for young people but for all clients as customer services skills have improved.</p> <p>2) [REDACTED] from [REDACTED] clinic: as a result of the pilot, decided to undertake a young people's satisfaction survey. Found some of the criteria frustrating, for example, there is a lot of emphasis on publicity and posters for the clinic. The clinic no longer orders posters as feedback from young people has shown that they are not an effective way of attracting them to the clinic. Also one of the criteria specifies producing leaflets in languages of the local community. A problem is that there are so many languages spoken that it would be very difficult to provide leaflets in each language. [REDACTED] pointed out that they use language line and have bi-lingual staff at the clinic.</p> <p>3) [REDACTED] from [REDACTED] Health Centre: [REDACTED] reported that it was difficult to find the resource to dedicate to this and that it would be very difficult to accommodate a 2 day training course for staff offered by the PCT. To be implemented in general practice it would need to be phased over a long time period. [REDACTED] raised a concern that having specific leaflets for young people in reception may cause problems such as younger kids littering the reception room with leaflets.</p> |                 |
| <p><b>2. Review of the young people friendly criteria.</b> The group reviewed the criteria and agreed some changes. The final version of the criteria was agreed and will be circulated to members.</p>  | AR to circulate |
| <p><b>3. Department of Health pilot</b></p> <p>[REDACTED] and [REDACTED] discussed how Westminster PCT has been invited to take part in the Dept of Health pilot of the "You're Welcome" criteria. This will involve completing a self-assessment exercise. [REDACTED] envisaged that this will be very similar to the process undertaken already. Pilot sites will receive £100 for taking part. All three current pilot sites agreed in principle to be part of</p>  |                 |

|   |   |
|---|---|
| this, having already completed the majority of the work needed.   |   |
| <p><b>4. Next steps</b></p> <p>■ discussed that the next steps would be for pilot sites to review their progress against the criteria. When they are ready they will need to submit their evidence to an evaluation panel and be visited by a group of young people to discuss the service. It is imagined that this will be 3 or 4 young people.</p> <p>In terms of the logo/accreditation, it was decided to wait for the Department of Health national publicity materials rather than pursue a local logo as it was felt this would be a waste of resources. However, the services can be publicised in other ways, for example, on the Bedroom Business sexual health internet site.</p> | <p>AR to work with the pilot sites so they are ready to submit.</p> <p>AR to work with ■ re the young people assessors.</p> |

**Consultancy Review Meeting, 31<sup>st</sup> July 2006**

Present: Antonia Rich (Consultant) and [REDACTED] (Client)

[REDACTED] and I reviewed our working relationship and the progress of the consultancy. [REDACTED] felt that having regular face-to-face meetings and email contact helped the progress of the consultancy. [REDACTED] said she felt it had been beneficial for ad-hoc meetings with other relevant professionals that on some occasions we had gone together and on other occasions I had attended on my own. For example, both [REDACTED] and I had met the Head of Communications at the PCT together, but I had met the Director of Public Health at the PCT on my own to discuss certain aspects of the project. This helped share the work between us. It was also helped because for more potentially challenging meetings we were able to support one another.

[REDACTED] also felt that having regular working party meetings had been successful for keeping the project on track. The working party members had acted as advisors and we will be able to use them as members of the evaluation panel when a Service submits their evidence for the Young People Friendly Award.

We both felt the involvement of young people in the project had been the most problematic part, as it had met with delays. Unfortunately the summer seemed a difficult time to consult with young people as many of the youth clubs had busy summer programs. However, I have been asked to do two sessions at a youth club in Victoria (one with boys, one with girls) in early August and I will use this as an opportunity to gain feedback from the young people on the project.



To: PCT Chief Executive  
Director of Children's Services  
Children's Health Lead, PCT  
LB Westminster

22<sup>nd</sup> August 2007

Dear Colleague

### ***You're Welcome* pilot**

We are writing to invite you to take part in a Department of Health pilot of *You're Welcome* (YW). These quality criteria lay out principles that will help health services – in the community and in hospitals – to be young people friendly.

First developed in 2005, YW has been updated for 2007 and supports implementation of standard 4 of the *National Service framework (NSF) for Children, Young people, and Maternity Services*. Adhering to these evidence-based criteria has the potential to contribute to achievement of targets (such as those aiming to improve under-18 conception rates, or patient and public involvement) and to developing high quality services. Involvement in the pilot will also support local areas as they implement Professor Ara Darzi's recommendations in *A Framework for Action* on improving sexual health, service development and winning public support for change.

The YW criteria include sections on accessibility, publicity, confidentiality and consent, the environment, staff training, skills, attitudes and values, joined-up working, monitoring and evaluation, involving young people and health issues for adolescents. There are also specific sections for sexual health and reproductive health services and child and adolescent mental health services (CAMHS).

Fuller details can be found on:

[www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_073586](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_073586)

Government Offices in four regions (London, North West, North East and South East) have been asked to support a pilot to test the *You're Welcome* criteria for national rollout. The selection of these four regions is based on them having Teenage Health Demonstration Sites (London's is in Hackney).

**The four regions have also been asked to recruit additional local areas and in London we have decided to invite six areas in addition to Hackney to participate in the pilot.** These are Barking and Dagenham, Greenwich, Lambeth, Redbridge, Richmond and Westminster. The areas have been selected due to their ability to meet eligibility criteria including existing good practice, capacity to deliver or an anticipation that the pilot will support the local area in achieving key targets for CAMHS and teenage pregnancy.

### What will this mean for you and your staff?

Local areas engaging with this pilot will benefit on a number of levels including:

- Positive contribution to broader targets such as the under-18 conception target
- Demonstrating commitment to meeting the requirements of the *Children's NSF* to be young people centred, and of wider local authority and PCT requirements to increase patient and public involvement in services.
- Providing positive evidence for regulatory bodies such as Ofsted and the Healthcare Commission.
- Establishing a local baseline for commissioners and providers to work from, enabling use of *You're Welcome* as a commissioning and performance improvement tool.
- Involvement of local young people in a pan-London young assessors project.

## Appendix C5

- Professional development and capacity building of staff involved in the pilot. Funds to back-fill staff absence will be made available.
- Being ahead of the game in terms of exploring the use of YW as a tool for commissioning.
- Influencing the development of design of a national logo and support materials for the YW quality mark
- Showcasing the work developed locally in a regional event in March 2008. This will precede national roll-out of the criteria.

### What we need from you

- Identification of a local lead who will liaise and work with the regional YW project manager.
- Identification of a number of local services to participate in a 2-3 hour self-assessment exercise, with possible follow up interview. Each service that returns an adequately completed self-assessment will receive £100. We would like you to select the following to participate:
  - 2-4 primary care practices (diverse models including single handed practices and large health centres)
  - 1 Sexual or reproductive health service
  - 1 CAMHS service
  - Local abortion providers (both NHS and independent under NHS contract)
  - Health service provided in youth or extended service setting
- Support to identify young people who would welcome the opportunity to train as young assessors.

To assess the achievability of the criteria, we will want to sample both organisations that could potentially easily achieve *You're Welcome* status and others that may be more challenged. Please bear this in mind when thinking about which local services to select to take part in the self –assessment.

We would very much appreciate your involvement. The project will be supported at regional level by a project manager who is currently being recruited. In the meantime the project will be led by Tanya Procter who will contact the PCT children's lead in the next 10 days to secure your commitment to the project, and to invite local participation in an event in early October to discuss the project further. If you require further information please contact Tanya on 07866 736066 or by emailing [Tanyaprocter@ntlworld.com](mailto:Tanyaprocter@ntlworld.com)

Yours sincerely,



Director of Children and Learners  
Government Office for London



Deputy Regional Director  
Regional Public Health Group

Cc: Director of Public Health  
Children's Commissioner  
Sexual Health Commissioner  
CAMHS Commissioner  
Teenage Pregnancy Co-ordinator  
CAMHS participation worker  
Local Authority participation officer  
IYSS/TYS lead



## ***'You're Welcome'* Launch London Thursday 24<sup>th</sup> April**

### **Programme**

- 10:00 **Introduction and Welcome**  
Jennifer Izekor (GOL Deputy Director, Children and Learners)
- 10:30 **Introduction and Outline**  
Maggie Barker (Director, Regional Public Health Group)
- 10:50 **National Context Keynote**  
Lily Makurah (YW National Co-ordinator, Department of Health)
- 11:10 **Regional Overview of Program**  
Sharon Dodd (YW Regional Programme Manager, GOL)
- 11:30 **Break**
- 11:45 **Young People's Participation London**  
Amy Wilkinson (YW Young People's participation lead, GOL), Naomi L'Amie (Brook)  
& Sarah Parry (Greater London Authority)
- 12:30 **Plenary**
- 12:45 **Lunch**
- 1:45 **Introduction to Workshops**
- 2:00 **Workshops (Workshop 1)**
  - 1. The Self-assessment Toolkit, quality assurance and standardisation  
Greenwich Primary Care Trust
  - 2. The Self-assessment Toolkit, quality assurance and standardisation  
Westminster Primary Care Trust
  - 3. Building YW into commissioning, Performance monitoring and Quality Assurance  
Barnet Primary Care Trust
  - 4. Engaging and mapping services - Strategic visioning  
Hackney Primary Care Trust (Teenage Health demonstration site)
  - 5. Young People's Engagement and role within YW  
Amy Wilkinson & London Borough of Lambeth
- 2:45 **Workshops (Workshop 2)**  
As above
- 3:45 **Feedback & Plenary**
- 4:15 **Close**



**Sexual Health session for Receptionists 11<sup>th</sup> July 2007**

**1. Do you feel more confident in knowing about the law regarding sex and young people than before the session?**

Yes (x12)

Yes, to some extent

Yes, gives info and discusses issues previously not aware of

**2. Do you feel more confident in knowing about confidentiality and consent in relation to young people than before the session?**

Yes (x10)

Yes, it confirmed my prior knowledge

Yes, it was useful. Only do not know why this info is not mandatory at the beginning of the job in Jefferiss Wing

No (x1)

**3. Will the way you work change after this session? If yes, how?**

Will be more conscious when attending to the young people

Yes, more focussed

Yes, having more of an understanding towards young people and their needs

Only in the sense of having a better understanding of some of the issues discussed today

Not really but I feel more informed as to the laws.

No, I will continue to be aware of patient needs

Not really (x2)

No because we have to follow procedures that are put in place

**4. What was the most useful thing about today?**

Learning the young person's law pertaining to sex and confidentiality

The interactions, different experiences

Law information

Having a good discussion

Discussion informative

The way the session was presented by trainers and input of the team

The handout re sex and law

Quiz

Learning about the sex and laws for young people

To hear everyone's point of view

Working in groups

Laws relating to 13-15 year olds

Discussing 4 scenarios and quiz on law and young sexually active people

**5. What was the least useful thing about today?**

The very useful notes supplied

I did not find any aspects of today's session least useful

Scenarios

Everything was useful

Discussions with other members

**6. How suitable was the presentation style to your needs?**

Very (x 3)

It was good because made everyone participate

Perfect

Very good and presented in an understanding and professional way

Fairly – it was relaxed – no pressure which is a good environment to learn in

Acceptable

Very good

Extremely

Clear – encouraged discussion and participation

**7. Any other comments?**

Nothing has been said about the physical structure of reception. Still not conducive to confidentiality

Thank you for your labour. I enjoyed the whole training course. You were great guys.

Well done trainers!

All sessions were interesting

No, well done

Very enjoyable and educational

Have had an enjoyable training

Enjoyed course very much

Thank you

**You're Welcome quality criteria pilot: Westminster Final Report**

Prepared by Antonia Rich: Health Improvement Specialist, Children and Young People, April, 2008

| <b>Contents</b>  | <b>Page</b> |
|--|-------------|
| Introduction to You're Welcome   | 2           |
| Westminster pilot  | 2           |
| Scoring of You're Welcome  | 3           |
| Results  | 3           |
| Engaging services and support during self-assessment                         | 3           |
| Implications of the pilot  | 4           |
| Is the You're Welcome toolkit fit for purpose?                               | 6           |
| Young people's participation in You're Welcome                               | 7           |
| Engagement with Children and Young People following the You're Welcome pilot | 7           |
| Sustainability of You're Welcome within Westminster                          | 8           |
| Local Coordinator's Perspective: Challenges and opportunities                | 8           |
| You're Welcome Action Plan   | 10          |

### Introduction to You're Welcome

The Department of Health (DH) You're Welcome quality criteria have been developed to support the implementation of standard 4 of the National Service Framework for Children, Young People, and Maternity Services. You're Welcome is expected to feature within the Children and Young People's Health Strategy with specific reference to achievements by PCTs in embedding YW into the delivery of services to young people. It is also expected to feature in the post consultation and planning for Healthcare for London.

The content of You're Welcome covers ten topic areas and is appropriate for service providers and strategic planners:

|  |  |
|--|--|
| • Accessibility                                | • Joined-up working                                    |
| • Publicity                                    | • Health issues for adolescents                        |
| • Confidentiality and consent                  | • Sexual health and reproductive health services       |
| • The environment                              | • Child and adolescent mental health services (CAMHS)  |
| • Staff training, skills, attitudes and values | • Monitoring and evaluation and involving young people |

### Westminster pilot

Antonia Rich (Health Improvement Specialist) was lead coordinator for the You're Welcome (YW) pilot in Westminster.

Each pilot Borough was asked to provide the following:

- Identification of a local lead who will liaise and work with the regional YW project manager
- Identification of a number of local services to participate in a 2-3 hour self-assessment exercise, with possible follow up interview. A minimum of 6 settings was required to include the following:

2-4 primary care practices

1 Sexual or reproductive health service

1 Child and Adolescent Mental Health Service (CAMHS)

Local abortion providers (both NHS and independent under NHS contract)

Health service provided in youth or extended service setting

- Support to identify young people who would welcome the opportunity to train as young assessors

Seven settings in Westminster agreed to take part in the pilot. These were:

Primary care practices – [redacted] Health Centre and [redacted] Health Centre

Sexual Health service – [redacted]

CAMHS – [redacted]

Abortion service – [redacted]

Contraceptive service – [redacted]

Health service in youth or extended service setting: [redacted]

[redacted] This is a GUM outreach service hosted in a youth club.

### Scoring of You're Welcome

Services are asked to score themselves on one of 3 levels: Starting out (1 point), Getting there (2 points) and Meets You're Welcome (3 points). Each criteria (for example, accessibility) contains a number of sub-criteria and services score themselves for each of these sub-criteria. A specific scoring system has been worked out for each criteria and is provided in the You're Welcome self-assessment template. A summary score can be added up for each criteria (e.g. accessibility). An

overall score for all the criteria can be added up in the overall summary sheet. The overall score for all the criteria identifies the services as either 'starting out', 'getting there' or 'meets YW'.

### Results

All services completed the self-assessments within the tight timescale and were submitted end January, 2008. None of the services reached the score necessary to achieve "You're Welcome" status. Five of the services had a self-assessment score of "getting there" and two had a score of "starting out". These overall scores mask huge variation in services self-assessments, with the young people's specific services scoring far higher than the generic (i.e., all ages seen) services. The three young people's services scored just under the score needed to meet the "You're Welcome" accreditation. In comparison for the 'generic' services, considerable work will need to be undertaken for them to meet the current score needed for being accredited with the YW standard.

### Engaging services and support during self-assessment

Engaging services in Westminster was a fairly smooth process and we were successful in gaining the participation of 7 services to complete the toolkit, including 2 GP practices. The invitation to participate was made from myself as local co-ordinator, initially by email. Only one service was hesitant to participate initially due to a concern that it would be time consuming to complete and doubts about the validity of doing such an exercise, but after a couple of conversations talking through what was required and reassurance that one of the purpose's of the pilot was to gather their feedback for DH, agreed to participate. Thus none of the services approached declined to participate.

All services were offered support in the form of one-to-one meetings to assist them to complete the document. This was generally well received by services and face-to-face meetings took place with four of the seven services that participated.

During the period of self-assessment, services were encouraged to contact myself as local co-ordinator if they needed any support with completing the paperwork. Services varied in the amount of assistance sought from myself, ranging from none to several hours spent completing the documentation together.

I believe engagement with services in Westminster was made easier due to the prior work undertaken in the Borough. Since 2006, three services in Westminster have undertaken a very similar process, where they were required to complete a set of criteria similar to the template required for the pilot, based on the YW criteria published in 2005.

### Implications of the pilot

There were some commonalities in the results of the self-assessments across services in terms of the criteria they were currently not able to meet:

1. **Accessibility.** Not all the pilot sites were able to meet the criteria (1.6) concerning the Disability Discrimination Act 1995 because they are based in a listed building. Other sites were based in old buildings with small spaces, making using prams or wheelchairs difficult. As local co-ordinator for YW, my powers are limited to enable changes to be made regarding accessibility and space is a real issue in an inner London Borough.
2. **Publicity.** The generic, (i.e., not YP specific) services, do not have specific publicity material for YP. It would be good if generic materials (e.g., confidentiality posters) with the YW logo on could be produced nationally to be distributed to services as for each service in each Borough to individually produce publicity material would be resource intensive and mean considerable duplication. All services scored poorly on criteria 2.3 regarding having materials for YP with learning disabilities and sensory impairments. For each service to be able to have a tailored leaflet for young people with learning disabilities and young people with physical disabilities/sensory impairments would require substantial investment in terms of resources, both in personnel in order to develop the materials and financial in terms of their production and maintenance to keep them up-to-date. Criteria 2.4 concerns service publicity material being available in languages used by local young people. Services felt this is difficult because of the many languages spoken in Westminster. As one service wrote, "there is not one group of YP from a particular



geographic area that warrant us getting leaflets in a particular language.” Another comment made by one young people’s service is that in their experience developing young people specific materials is time-consuming and ineffective. In their experience, they put a lot of effort into developing young people friendly materials, but when asked how they found out about the service, young people most often say from a friend and very rarely cite publicity materials.

3. **Confidentiality and Consent.** A weakness of the majority of services was failure to prominently display confidentiality posters, and young people’s right to a confidential service. Services varied widely in the amount of training staff had received in confidentiality and consent.
4. **Environment.** This criterion drew attention to in the provision of CRB checks for staff. Some services ensured all staff had been CRB checked however this was not a requirement in all services.
5. **Staff training.** As with training in confidentiality, services varied widely in the amount of training staff have received regarding working with young people. As a local co-ordinator, it would be very helpful to have national guidance on what is considered sufficient training to meet these criteria. Also guidance is needed regarding the content of such training to be able to provide some guidance and consistency for services. Through the national roll out of YW, guidelines which establish the amount and content of training staff would ideally receive would assist a consistent approach across services within and between Borough’s.
6. **Joined-up working.** As local co-ordinator the pilot highlighted how services can be somewhat isolated in terms of the information they have about other providers and also to some extent how there is a lack of appropriate mechanisms and structures to ensure services have this information and that this information remains up-to-date. The extent of joined up working also often seemed relatively limited, for example, contraceptive services talked about having information about other sexual health providers such as GUM services, but not other providers, for example drugs and alcohol services. We are fortunate in Westminster to possess an internet based database which provides information about services called the WISH (Westminster Information Sharing Project) database, however not all services were aware of the database. One GP practice stated that they need “orientation in local YPs services”.
7. **Monitoring and evaluation and involvement of young people.** The generic services in the pilot struggled to meet this criterion. Again, as with the training and publicity issues raised above, there needs to be national documentation to which local co-ordinators could refer in order to assist services to meet this criterion. It is likely that services, such as GP practices, have never undertaken young people involvement and will need substantial support to enable them to progress with this.

As local co-ordinator I felt the toolkit was useful in terms of identifying areas for development and areas of good practice for each service that participated. It also helped identify needs across services, for example, it became apparent from the results of the self-assessments that the greatest development needs were around monitoring, evaluation and involvement of young people, publicity and training in working with young people and confidentiality and consent. As a result for the roll out of YW, there are significant development needs for services in terms of involving people and workforce development (i.e., training in working with YP and confidentiality and consent). These will need to be incorporated into the local action plan. As stated above, publicity was also identified as a need; however I have been informed that support for this will happen at a national level.

#### **Is the YW toolkit fit for purpose?**

Several points were made from services regarding the YW toolkit and/or were observed by myself as local co-ordinator:

##### **a) Time needed to complete the toolkit**

Verbal feedback received from services was that the document was time consuming to complete, for example, one of the services stated that the document took 7 hours to complete and one of the other services stated it took a total of 8 hours. Comments from another two services were, "A great deal too long, and work undertaken by individuals as not enough notice to convene working group/s from service to complete it" and "this assessment has taken me days to complete. I feel it is far too cumbersome a document".

A specific comment was made that if clinical staff should be involved in the completion of the self-assessment, then resources should be made available for this as clinical staff are paid for clinical work and not completing these documents.

### **b) Completion of the paperwork**

Services all completed the paperwork as needed in terms of filling in the documentation for each individual criterion and thus obviously understood what was required of them in this respect. However, the majority of services returned their self-assessments without completing the summary scoring sheet themselves. As a result, I was required to complete the scoring sheet for them or contact them to request them to complete this part of the self-assessment. My impression is that some of the services did not understand the scoring process and that some felt that the summary sheet was a duplication of work already undertaken for each criteria. I also needed to prompt the majority of services to fill out the feedback questionnaire. I suspect because the feedback questionnaire was at the end of the self-assessment documentation, it was easily overlooked.

### **c) Holistic assessment of services**

As the local coordinator, I received feedback that services valued the YW toolkit as a mechanism to look at their service in a comprehensive way and consider different angles of a young people's experience of a service. Thus, services did find completing the toolkit valuable.

### **d) Redundancy of some of the criteria**

A feeling from some of the services was that the toolkit over emphasised the importance of written publicity materials. It was felt that young people do not want or use written materials and that it was thus a waste of resources to spend time developing such materials.

### **Young people's participation**

Each Borough was asked to identify between 5 and 10 young people who were to be supported by peer educators to mystery shop a sample of services who participated in the pilot. Unfortunately Westminster did not complete the young people's participation element. It was intended by Government Office for London that this would be led by the youth participation team at the local authority and that young people would come from existing structures and programmes. However there were not the young people 'ready to go' in Westminster. As a result, a flyer was sent to over twenty five youth projects to try and recruit young people ready for participation in the project next financial year however this was not a successful means of recruitment. I also introduced the project to the 6th form at a secondary school and from this two young men expressed an interest in participating. As local co-ordinator I see the young people's element to You're Welcome as a fundamental component of the project which will need more thought and support for the roll out of YW in order to be successful.

### **Engagement with Children and Young People following the YW pilot**

I have been working regularly with the lead for the Children and Young People's Joint Strategic Needs Assessment (CYP JSNA). Part of the remit of the JSNA is to map CYP services within Westminster. Myself and the CYP JSNA lead will work closely to complete this work over the forthcoming year.

As a result of participating in YW, I have been investigating what is currently known about young people's engagement in health services. After several discussions with the lead for the JSNA and the Involving People team at the PCT it has become clear that there is very little known about

young people's experiences of health services in Westminster and myself and colleagues wish to address this situation. As a result, several actions have been established and are progressing:

- 1) Children and young people will be a focus of this year's 'Ask your patient' week led by the Involving People team. Young people will be asked for their views on school nursing and speech and language services.
- 2) Westminster City Survey. Westminster City Council regularly carries out a questionnaire in schools which includes a few questions on health. We are trying to increase the number of health questions in this year's survey.
- 3) Mystery shop of the YP's substance misuse service. The young people's substance misuse co-ordinator at Westminster City Council wishes to use You're Welcome for the young people's substance misuse service and is very keen to carry out a mystery shopping exercise.

Initial talks have identified that there is a need for a pool of Westminster young people to be known to the involving people team who are able to undertake involving people activities, including those required for the roll out of You're Welcome. Discussions are currently underway between myself and the involving people team about how best to progress this.

#### **Sustainability of YW within Westminster**

Several steps have taken place within Westminster to raise awareness of the YW pilot to governance structures and prepare for the sustainability and roll out of YW. I have written briefing papers and/or presented at the following strategic groups:

Be Healthy Group<sup>1</sup> (sub-group of the Children and Young People's Strategic Partnership)  
 Children and young people's voice group  
 Teenage pregnancy strategy group  
 Sexual health strategy group  
 North West London Children's Strategic Leads meeting

A meeting has taken place between myself, [REDACTED] (YW regional coordinator), [REDACTED] (Children's Services Commissioner, WPCT) and [REDACTED] (Sexual Health Commissioner, WPCT). This meeting was very positive and both commissioners are supportive of introducing the programme into commissioning. [REDACTED] has also discussed the initiative with [REDACTED], Director of Children's Services at Westminster City Council.

I have also met with the young people's substance misuse coordinator at Westminster City Council who wishes to introduce YW to the substance misuse service.

As discussed above, in the forthcoming year I will work closely with the lead for the CYP JSNA to ensure You're Welcome is a key part of the JSNA.

#### **Local Coordinator's Perspective: Challenges and opportunities**

After the DH YW pilot, I will no longer be able to be the local coordinator for Westminster due to changing post. The role will continue to part of the remit of the Health Improvement Specialist (young people's sexual health) and a replacement is currently being recruited. I will line manage this post.

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<sup>1</sup> The Be Healthy Group is the multi agency strategic planning group for improving outcomes for the health and well being of children and young people as set out in the National Service Framework for Children, Young People and Maternity Services, the Be Healthy outcome of Every Child Matters and other relevant guidance for this care group in Westminster. The group acts as the Be Healthy sub group of the Children and Young People's Strategic Partnership and is chaired by the Director of Service Development, who is also the Health representative on the Children and Young People of Strategic Partnership (CYPSP).

As local co-ordinator I felt the biggest strength of the pilot in Westminster has been the participation and engagement of services and enhanced relationships between myself and the service providers, some of whom I had not met before the beginning of the pilot. Also commissioners at the PCT have been very supportive of the initiative.

Completing the You're Welcome toolkit was a useful exercise in terms of revealing commonalities across services in terms of areas for development and thus identify where best to target resources. For example, as noted earlier, a gap for the majority of services concerned collecting young people's feedback and thus work has begun to try and identify how to address this and support services to involve young people. The toolkit can also help identify strengths within and potentially across services.

Finally, YW provides a mechanism to reward services who have undertaken the commitment and investment in ensuring their service is 'young people friendly' as no mechanism currently exists.

In terms of challenges, the biggest as local coordinator was the young people's participation element. The youth service did not have young people 'ready to go' and our efforts to recruit young people in the tight timescale were unsuccessful. Several discussions have taken place since and plans are underway to develop this so young people can be involved in the roll out of YW.

As mentioned previously a challenge for some services was the length of time needed to complete the YW documentation. Some services also found the summary scoring sheet confusing to complete.

The biggest anticipated challenge for the roll out of YW is the capacity needed in terms of co-ordinating the programme. Substantial work will need to be undertaken at a local level, particularly in developing the young people's engagement and developing the resources required to support services, for example, developing and co-ordinating training and support materials, such as publicity. The action plan provided in the next section provides an indication of the tasks needed to be achieved for YW to be launched fully in Westminster.

### **YW Action Plan**

I have put together a draft action plan for the sustainability of YW. This will continue to be developed.

**Westminster Action Plan for Sustainability of You're Welcome 2008-2009**

(please note this action plan is a draft and will be further developed and agreed by the YW working party)

**Key:**

YW = You're Welcome

DH = Department of Health

HIS YPSH = Health Improvement Specialist: Young People's Sexual Health (this post is YW Local Coordinator)

HIS CYP = Health Improvement Specialist: Children and Young people

PHIRU = Public Health Information and Resource Unit

LA = Local Authority

PCT = Primary Care Trust

| <b>Strategic Objectives</b>                            | <b>Actions</b>   | <b>Lead</b>   | <b>Resources required (to be completed)</b> | <b>Risks (to be completed)</b> |
|--|--|---|---|--------------------------------|
| <b>Sustainable implementation</b>                      | Develop action plan for roll-out of YW   | HIS YPSH  |   |                                |
| Plan phased introduction of YW                         | Phased implementation: agree which services to target in line with DH priorities<br>Engagement with targeted services<br>Set targets for 08/09 and 09/10 | HIS YPSH  |   |                                |
| <b>Effective strategic leadership</b>                  |  |   |   |                                |
| Establish YW steering group                            | Steering group to include membership from PCT & LA & Service Providers; agree reporting structures and terms of reference                                | HIS YPSH  |   |                                |
| <b>Mapping of young people's services</b>              | Map existing young people's services   | Public Health Programme Manager (Joint Strategic Needs Assessment)<br>Supported by HIS YPSH & HIS CYP |   |                                |
| <b>Establish YW in commissioning</b>                   |  |   |   |                                |
| Build YW into commissioning and performance frameworks | Decision by strategic leaders<br>Events to inform commissioners (e.g., workshop)<br>Explore possibility of introducing YW                                | Commissioning - PCT<br>Service Development (Sexual Health commissioner; children's                    |   |                                |

|   |   |   |  |  |
|---|---|---|--|--|
|   | to the Local Quality and Outcomes Framework (QOF)   | services commissioner; primary care development managers)<br>Commissioning – Local Authority  |  |  |
| Build YW into school nursing drop-ins                               | Agree introduction of YW into school nursing services<br>Implement YW criteria into school nurse drop-ins   | HIS YPSH<br>School Nurse Lead<br>Every Child Matters officer<br>TP co-ordinator   |  |  |
| Build YW into YP's substance mis-use service                        | Support YP's substance mis-use coordinator and [REDACTED] service to implement YW   | Young people's substance mis-use coordinator  |  |  |
| <b>Full engagement of young people</b>                              | Young people's coordinator (local authority) engaged to deliver the participation and training of young assessors<br>Young people engaged in monitoring and evaluation of health services | Youth participation worker (LA)<br>Supported by:<br>Involving people team (PCT)<br>HIS YPSH (PCT)<br>Substance mis-use project officer (LA) |  |  |
| <b>Publicise YW to services and young people to raise awareness</b> | Communication strategy in place-including provider forums<br>Local publicity campaign-alongside national campaign   | HIS YPSH<br>Communications Dept   |  |  |
| <b>Support services to achieve award</b>                            |   |   |  |  |
| Support materials   | Develop support materials for services  | PHIRU<br>HIS YPSH   |  |  |
| Training  | Workforce development   | Training Departments (both LA and PCT)  |  |  |
| <b>Accreditation of services with YW</b>                            |   |   |  |  |
| Accreditation mechanism established                                 | Develop process for services to be accredited with YW status  | HIS YPSH  |  |  |
| Quality assurance mechanism   | Quality assurance mechanism   | HIS YPSH  |  |  |

|                        |  |          |  |  |
|------------------------|--|----------|--|--|
| established            | where the experiences and views of young people are considered paramount |          |  |  |
| Celebration of success | Event to celebrate services accredited with YW                           | HIS YPSH |  |  |

## **Results of the Consultation for Smoking Cessation Lecture, MSc Health Psychology, UCL**

### **Do you have any prior knowledge and/or experience of smoking cessation?**

No (6 responses)

Not exactly. I have some training in health promotion.

Only general knowledge of Health Behaviour models which may be applied to smoking cessation

No formal training, but theories etc.

Marginal as part of my undergraduate health psychology module. No formal training.

I have prior knowledge from my A-level and undergraduate course – this is minimal.

Yes been an advisor since March.

### **What would you like to gain from this lecture?**

Current status of research in smoking cessation. How NHS is involved in this process.

To gain knowledge of practical aspects of smoking cessation in the way a practitioner would do it.

Main issues surrounding smoking cessation.

Knowledge of the most commonly used models and techniques, criticisms of methods currently used.

General overview of what and how is done, how successful it is, important factors to look at.

More details. Knowledge of real life examples.

Understand how to encourage people to stop smoking – particularly those who have been smoking for a long time.

How to work with different groups and what the main emphasis should be, i.e. NRT/behavioural.

An understanding of smoking cessation techniques and how successful they are.

Overview of the smoking cessation research.

Successful research, re smoking cessation

An insight into how smoking cessation interventions work, considering that so many smokers relapse, what interventions do work and why?



## **Results of the Consultation for Smoking Cessation Lecture, MSc Health Psychology, City University**

### **Do you have any prior knowledge and/or experience of smoking cessation?**

No (x2)

I have never smoked so have no experience of the official smoking cessation procedures and basic knowledge about patches etc.

I have a decent amount of prior knowledge after completing my undergraduate dissertation on smoking cessation and the influence of the NHS anti-smoking television adverts.

### **What would you like to gain from this lecture?**

As well as the systems in place to encourage cessation, an idea of the practicalities of working in an organisation like the Camden PCT.

To understand the methods used and the main problems you face. How do you manage the unrealistic targets you are set? How successful is it?

What exactly do you do?; How varied is your work?

I would like to gain an insight into what is involved in your job working in smoking cessation on a day to day basis.

An understanding of what work methods/techniques are used in smoking cessation – what works, what doesn't work and why.

What could one expect to experience when attending a smoking cessation clinic?

Overview of the history of smoking cessation

**Smoking Cessation Lecture, MSc Health Psychology, University College London (UCL) (November, 2004) and City University (March, 2005).**

**Teaching Plan**

**Aims:**

1. To highlight the dangers of smoking to health
2. To illustrate the biopsychosocial model of addiction in the context of smoking
3. To explain the structure of smoking cessation services in the NHS
4. To describe current treatment protocols in NHS smoking cessation services
5. To highlight the role of health psychology in smoking cessation
6. To provide information about the risks of smoking in pregnancy and how to help pregnant women stop smoking (UCL lecture only)

**Lecture Objectives:**

At the end of the lecture students should have an understanding of:

1. The risks of smoking to health and the biopsychosocial factors in cigarette addiction
2. The structure of smoking cessation services in the NHS
3. Stop Smoking Interventions in the NHS
4. The role of health psychology in smoking cessation

**Models of Learning:**

The lecture will utilise a combination of both didactic and experiential teaching methods:

Didactic methods: PowerPoint presentation

Experiential methods: a demonstration of how to use a carbon monoxide monitor, smoking cessation quiz, role play (UCL only) and case study (City only).

**Content/Teaching Methods:**

**UCL lecture**

- PowerPoint presentation (covering the Aims outlined above)
- Role play with lecturer and student with Carbon Monoxide monitor, choosing a Nicotine Replacement Therapy Product and discussion of psychological strategies to aid quitting
- Role play in small groups (one student as an advisor, one as a client and one as an observer)
- Smoking Cessation Quiz
- Feedback Questionnaire
- Reading List

**City Lecture**

- Results of Needs Assessment (asking what students wanted to gain from the lecture)
- PowerPoint presentation (covering the Aims outlined above)
- Demonstration of using Carbon Monitor with student
- Case Study
- Smoking Cessation Quiz
- Feedback Questionnaire
- Reading List

**Teaching Materials:**

- Lecture slides via PowerPoint presentation
- Case Study
- Written materials – NHS publication, 'Giving Up For Life: Don't Stop Giving Up' and Fagerstrom Test for Nicotine Dependence
- Nicotine Replacement Therapy products (UCL only) and Carbon monoxide monitor
- Smoking Cessation Quiz
- Feedback Questionnaire
- Reading List

**Assessment Method:**

UCL

Assessment comprises an essay question administered under exam conditions. The question was entitled: "The Department of Health white paper 'Smoking Kills' (1998) set a target of reducing the number of people smoking by 1.5 million by 2010. What can health psychology contribute?"

City

Assessment comprises a 3,000 word essay entitled: 'A critical evaluation of health promotion interventions concerned with...' one of the following 5 topics: food, eating and prevention of obesity; alcohol, drinking and prevention of alcoholism; tobacco smoking: prevention and cessation; sexual health and activity and exercise.

**Length of assessment:**

Two hours for UCL lecture

One hour for City lecture

**Evaluation:**

Students were asked to complete a feedback questionnaire at the end of the lecture. Students are also required to fill in a feedback form for the MSc lectures as a whole at the end of term.

**Small Scale Evaluation Report: Smoking Cessation Lecture at University College London (UCL) (November, 2004) and City University (March, 2005)**

**1) Student Feedback from UCL**

**Closed Questions – Quantitative Data**

1) What did you think of the lecture overall?

|                  |     |    |    |    |                 |
|------------------|-----|----|----|----|-----------------|
| <i>Very Good</i> |     |    |    |    | <i>Very Bad</i> |
| 82%              | 18% | 0% | 0% | 0% |                 |

2) What did you think of the content of the lecture?

|                  |     |    |    |                 |
|------------------|-----|----|----|-----------------|
| <i>Very Good</i> |     |    |    | <i>Very Bad</i> |
| 64%              | 36% | 0% | 0% | 0%              |

3) How do you rate the presentation of the lecture?

|                  |     |    |    |                 |
|------------------|-----|----|----|-----------------|
| <i>Very Good</i> |     |    |    | <i>Very Bad</i> |
| 73%              | 27% | 0% | 0% | 0%              |

4) The level of difficulty was

|                 |    |     |    |                      |
|-----------------|----|-----|----|----------------------|
| <i>Too Easy</i> |    |     |    | <i>Too Difficult</i> |
| 0%              | 9% | 82% | 9% | 0%                   |

5) My understanding of smoking cessation has improved

|              |       |    |    |                   |
|--------------|-------|----|----|-------------------|
| <i>A lot</i> |       |    |    | <i>Not at all</i> |
| 45.5%        | 45.5% | 9% | 0% | 0%                |

**Open Ended Questions – Qualitative Data**

Responses from the open-ended questions have been subject to content analysis. Beneath each theme are examples of quotes from the students.

**Responses to 'What did you find most useful about the lecture?'**

13 students attended the lecture; 10 made comments in response to this question.

1) *Role Play = 3 responses*

"The practical aspects of the presentation made the presentation more realistic and more demonstrative"

"Role-play was really interesting. Nice to see what would happen in that type of situation"

2) *Personal experience of lecturer = 2 responses*

"The lecturer's personal experience of the area and working in smoking cessation"

"Taken by someone who works in the field everyday – not all theory based"

3) *Clear, structured presentation = 2 responses*

"A very clear presentation, thank you"

"It was structured, logical. It provided us with most important facts about smoking, smoking cessation, research has practical implications. It was great!"

4) *Learning about NRT/Carbon monoxide monitor = 2 responses*

"The various NRT devices and the carbon monoxide monitor"

5) *Statistics = 1 response*

"The statistics re: dangers to health and the low success rates"

6) *Presenters style = 1 response*

"Very good interaction with the class"

7) *Miscellaneous = 2 responses*

"Just gaining knowledge about an area I didn't know much about before is very good"

"NHS services"

Responses to 'How could the lecture be improved?'

7 students made comments in response to this question.

1) *Case study (e.g., video or visitor) = 2 responses*

"Might have been nice to see a video of a real life consultation – but this did not affect the standard of the lecture"

"Case studies of people quitting/trying to quit (video, visitors etc)"

2) *Positive comments in response to this question = 2 responses*

"I don't have any complaints. I found that the information was clearly presented and easy to comprehend"

"I can't think of anything. It was very informative and interesting"

3) *Miscellaneous = 3 responses*

"Would have preferred to have handouts at start (though I understand why you needed to ask us questions at end, so no handouts during lecture)"

"Bit more detail"

"Current research (if there actually is any)"

## **2) Student Feedback from City University**

### **Closed Questions – Quantitative Data**

1) What did you think of the lecture overall?

|                  |                   |                |                  |                 |
|------------------|-------------------|----------------|------------------|-----------------|
| <i>Very Good</i> | <i>Quite Good</i> | <i>Average</i> | <i>Quite Bad</i> | <i>Very Bad</i> |
| 44%              | 56%               | 0%             | 0%               | 0%              |

2) What did you think of the content of the lecture?

|                  |                   |                |                  |                 |
|------------------|-------------------|----------------|------------------|-----------------|
| <i>Very Good</i> | <i>Quite Good</i> | <i>Average</i> | <i>Quite Bad</i> | <i>Very Bad</i> |
| 48%              | 52%               | 0%             | 0%               | 0%              |

3) How do you rate the presentation of the lecture?

|                  |                   |                |                  |                 |
|------------------|-------------------|----------------|------------------|-----------------|
| <i>Very Good</i> | <i>Quite Good</i> | <i>Average</i> | <i>Quite Bad</i> | <i>Very Bad</i> |
| 80%              | 16%               | 4%             | 0%               | 0%              |

4) The level of difficulty was

|                      |                        |                    |                   |                 |
|----------------------|------------------------|--------------------|-------------------|-----------------|
| <i>Too Difficult</i> | <i>Quite Difficult</i> | <i>About Right</i> | <i>Quite Easy</i> | <i>Too Easy</i> |
| 0%                   | 4%                     | 92%                | 4%                | 0%              |

5) My understanding of smoking cessation has improved

|                  |                    |                   |                      |                   |
|------------------|--------------------|-------------------|----------------------|-------------------|
| <i>Very Much</i> | <i>Quite a lot</i> | <i>Just about</i> | <i>A little More</i> | <i>Not at all</i> |
| 20%              | 44%                | 12%               | 24%                  | 0%                |

### **Open Ended Questions – Qualitative Data**

Responses to 'What did you find most useful about the lecture?'

22 students attended the lecture; 20 made comments in response to this question.

1) *Learning about smoking cessation techniques = 6 responses*

"Learn about techniques that help smokers to quit"

"The lecture dealt into the processes of smoking cessation"

2) *Presenters style = 5 responses*

"Relaxed and friendly presentation"

"Approachability of speaker"

"Interacted well with audience"

3) *Presentation clear/easy to understand = 4 responses*

"Good PowerPoint presentation, easy to read and good to follow"

"Information clear, not too much information"

4) *Finding out what a smoking cessation advisors job involves = 3 responses*

"Found the information about what the job involves interesting"

"Information on the role of a health psychologist in smoking cessation"

5) *Demonstration and explanation of carbon monoxide = 3 responses*

"Like the demonstrations"

"Carbon monoxide tester"

6) *Case study = 3 responses*

"Case study useful"

7) *Interesting = 2 responses*

"Very interesting content"

8) *Didn't repeat information = 2 responses*

"That you checked we knew information e.g., theories of health behaviour and did not repeat them"

9) *Reading list = 2 responses*

"Thanks for reading list"

10) *Statistics and charts = 3 responses*

"Statistics on the different therapies used"

"The holistic approach – the statistics and examples"

11) *Quiz = 1 response*

"Quiz – reinforced what we were told in lecture"

12) *Miscellaneous = 3 responses*

"Short and sweet"

"Not too much theory"

Responses to 'How could the lecture be improved?'

10 students responded to this question.

1) *Positive comments in response to this question = 5 responses*

"Thoroughly enjoyable"

"Very good – one of our best lectures re interesting and contents"

"Don't think it can be – sorry!"

"Very comprehensive, doesn't need improving"

"I don't know. Close to perfect"

2) *More information about smoking cessation interventions = 4 responses*

"More guidelines in how to do a smoking cessation programme"

"More examples and explanations about what is included in group and one-to-one sessions"

3) *Quiz = 1 response*

"Scrap the quiz!!"

## **Reflective Report**

### **Strengths, Weakness and Self-Reflection**

The quantitative data indicates the lecture was positively received by the students. In answer to the question 'What do you think of the lecture overall?', 100% of UCL and City students responded either 'very good' or 'quite good'. The feedback also suggests the difficulty level was pitched appropriately, with 92% of City students and 82% of UCL students rating the difficulty level as 'about right'.

Responses to the question 'my understanding of smoking has improved' were more positive for UCL students than for City students. One possible explanation could be that City students have more experience of smoking cessation than UCL students. It is not known if this is the case because not many of the City students returned their questionnaire which asked about their experience in smoking cessation. Another possible explanation is that the UCL lecture was longer, so I was able to provide students with more information and I was also able to include a role-play of a stop smoking session with a client which was not present in the City lecture.

The small scale evaluation helped me to view the strengths and weaknesses of the lecture. Overall, I was pleased with my feedback. Students commented that they liked my presentation style, for example, students wrote that I was approachable and interacted well with the class. I received some positive comments from students, for example, in response to 'How could the lecture be improved?' one student wrote "I don't know. Close to perfect".

Several students commented on the presentation being clear and easy to understand and rated the presentation highly (e.g., 80% of City students rating it as 'very good') so I consider this a particular strength of the lecture. In response to the question, 'What did you find most useful about the lecture?', students commented on learning about smoking cessation techniques, style of presenter, the presentation being clear and UCL students commented on finding the role-play beneficial. I was glad I included the more interactive parts of the lecture, for example the case study and carbon monoxide demonstration as several students commented on how they enjoyed the practical aspects of the lecture.

Regarding weaknesses, in response to the question, 'How could the lecture be improved?', two of the UCL students suggested case studies of people quitting, such as a video or visitor. I tried to incorporate this suggestion into the City lecture with the addition of a written case study which students worked on in pairs and then discussed with the whole class. Three of the City students commented that they had found the case study useful in the feedback, suggesting that this was a worthwhile addition.

Four of the City students commented that they would have liked more information about smoking cessation interventions. I feel disappointed that this is the case as a large percentage of my current job is spent delivering smoking cessation interventions and I would have liked the students to have a good understanding of this area. As this did not arise in the feedback from UCL students, I wonder whether this is because I included a role-play for the UCL students and this was a good method of illustrating smoking cessation interventions.



## **Reflective commentary of video footage (from City University Lecture)**

### Demonstration of CO Monitor

This section of the lecture involves demonstrating how to use a carbon monoxide (CO) monitor as part of the stop smoking intervention. I think the CO demonstration, utilising a dyadic model of teaching, was an appropriate method because it enabled me to interact with students and hopefully brought the material to life. Students laughed and asked me questions, providing an indication that they enjoyed this section and were involved. On reflection, I feel my explanation of the relevance of the CO reading and how to use the CO monitor was clear, however I did not give as comprehensive an explanation of why carbon monoxide is damaging to health as I would have liked. I would normally go into more detail with a client. I think this was because I was a bit nervous.

I was asked whether the carbon monoxide in the atmosphere and burning incense would give a reading. I was able to answer this question accurately because it is often asked by clients. I think I could have used this opportunity further to illustrate how much smoking contributes to an individuals CO reading, when compared with pollution and other things that burn, such as incense.

### Zyban

I felt my explanation of the drug Zyban as a smoking cessation aid was clear and concise. I covered a lot of information quickly on a topic that most, if not all, students would be unfamiliar with. I think I could improve this by speaking more slowly and checking if students had any questions at the end of the slide.

### Discussion of the case study

The students appeared to participate and enjoy the case study as a number of students volunteered answers and there was some laughter.

### Delivery style

Overall I am reasonably happy with my delivery style. I think my voice is clear and I thought my body language and manner is friendly and approachable. However I noticed I say 'erm' quite a lot which I was not conscious of and will try to do less. I also noticed I laughed quite a lot, perhaps because of nerves and I wonder if people may have found this distracting. I think taking some deep breaths and trying to relax before I begin teaching may help this.

### Did the session meet the aims and objectives?

This section of the lecture was designed to meet the aim and objective of providing students with an understanding of stop smoking interventions in the NHS. I feel the session did meet these requirements. I was able to describe medications, demonstrate the CO monitor and discuss a practical example of a client via the case study. The part of the training I am most happy with was the carbon monoxide monitor as I felt it was both educational and enjoyable for students.

### Steps to improve my delivery

I found watching myself on video a valuable experience and will use this technique again to evaluate my performance. I will also ask an observer, such as my colleagues for feedback in the future, as I find it useful to get this perspective.

Needs Assessment for PSHE CPD Session

1) What is your profession?

Family Planning Clinical Nurse Manager

Health Visitor

Family Planning Nurse (x2)

School Nurse

2) Do you have any prior knowledge and/or experience of reflective practice and/or working with personal values regarding sexual health? If yes, please give details.

- No (x2)
- As a nurse we use reflective practice in clinical supervision. In FP our practice is to be non-judgemental. Each person has his/her values, each country has its values and they can all differ (personal and cultural).
- Have done a lot of reflective practice during Nursing degree and Health Visiting Post graduate diploma. Do it informally at work on a day-to-day basis. However only touched on personal values around sexual health @ an FPA training day.
- Yes, I completed a short course with the FPA approx 2 years ago. It was a very practical course where we spent a lot of time looking at activities around personal values. I have been involved in many PSHE days in primary schools and aware how personal values impact on your sessions.

3) What would you like the gain from the session?

- Greater clarification of what exactly is needed for this part of portfolio.
- Any tips on brushing up my reflective writing skills would be appreciated – although a lot of mental reflection done, it is sometimes difficult to put in words/phrases. Would appreciate doing any exercise that challenges my values and beliefs regarding sexual health. Always love a good discussion.
- Reflective practice and working with personal values
- To detach ones own personal thoughts and explore patients own views and opinion on self
- Help and support with writing my personal values statement. Often it is not put down in writing and I may find it difficult to use the words to express my own values.

**Reflections and Personal Values Workshop for Community Nurses, September, 2006**

**Teaching Plan**

**Aims and Objectives:**

- To discuss what is meant by reflection
- To explore the process of reflection and how to write about it
- To gain insight into our own personal values regarding sexual health
- To understand how this fits into the requirements of the portfolio

**Models of Learning:**

The workshop will utilise a combination of both didactic and experiential teaching methods:

Didactic methods: PowerPoint presentation

Experiential methods: Small group work; Personal Values exercise

**Content/Teaching Methods:**

- Introductions – opening round
- Aims and Objectives
- Confidence Ratings
- Group Agreement
- PowerPoint slides on reflection (including distribution of handouts)
- Exercise - Small group work (alone, then in pairs practise reflective writing using handouts)
- Personal Values Exercise
- PowerPoint slides on values
- Confidence ratings and Feedback Questionnaire

**Teaching Materials:**

- Slides via PowerPoint presentation
- Flip chart paper and marker pens
- Values cards and Instructions for Values Exercise
- Laptop computer and projector
- Written materials (Feedback questionnaire, Handouts of PowerPoint slides, Confidence ratings, Gibbs cycle, Phrases to help you reflect, Training review form, A caring moment with Ann, Examples of sentences to use in portfolio - speech bubbles, and Reading List).

**Assessment Method:**

Confidence ratings

**Length:**

Two hours

**Evaluation:**

Trainees are asked to complete a feedback questionnaire

**Evidence:**

Case Study

**Participant's Feedback: Personal Values and Reflection Workshop  
(September, 2006)**

1) What did you think of the workshop overall?

|                  |                   |                |                  |                 |
|------------------|-------------------|----------------|------------------|-----------------|
| <i>Very Good</i> | <i>Quite Good</i> | <i>Average</i> | <i>Quite Bad</i> | <i>Very Bad</i> |
| 25%              | 50%               | 25%            | 0%               | 0%              |

2) What did you think of the content of the workshop?

|                  |                   |                |                  |                 |
|------------------|-------------------|----------------|------------------|-----------------|
| <i>Very Good</i> | <i>Quite Good</i> | <i>Average</i> | <i>Quite Bad</i> | <i>Very Bad</i> |
| 25%              | 50%               | 25%            | 0%               | 0%              |

3) How do you rate the presentation of the workshop?

|                  |                   |                |                  |                 |
|------------------|-------------------|----------------|------------------|-----------------|
| <i>Very Good</i> | <i>Quite Good</i> | <i>Average</i> | <i>Quite Bad</i> | <i>Very Bad</i> |
| 25%              | 75%               | 0%             | 0%               | 0%              |

4) The level of difficulty was

|                      |                        |                    |                   |                 |
|----------------------|------------------------|--------------------|-------------------|-----------------|
| <i>Too Difficult</i> | <i>Quite Difficult</i> | <i>About Right</i> | <i>Quite Easy</i> | <i>Too Easy</i> |
| 0%                   | 0%                     | 100%               | 0%                | 0%              |

5) My understanding of personal values in relation to sexual health has improved

|                  |                    |                   |                      |                   |
|------------------|--------------------|-------------------|----------------------|-------------------|
| <i>Very Much</i> | <i>Quite a lot</i> | <i>Just about</i> | <i>A little More</i> | <i>Not at all</i> |
| 33%              | 33%                | 33%               | 0%                   | 0%                |

6) My understanding of reflection has improved

|                  |                    |                   |                      |                   |
|------------------|--------------------|-------------------|----------------------|-------------------|
| <i>Very Much</i> | <i>Quite a lot</i> | <i>Just about</i> | <i>A little More</i> | <i>Not at all</i> |
| 0%               | 50%                | 50%               | 0%                   | 0%                |

7) What did you find most useful about the workshop?

The exercise and handouts. The whole session was very useful.

Values – real eye opener.

Was good to revisit reflection and realise that I have improved in that area. Personal values will certainly help me when I write the statement for portfolio.

Easy going/comfortable group to work within. Calmness.

8) How could the workshop be improved?

Maybe “speed up” the personal values exercise but does this defeat the object of reflections?

9) Any other comments?

Thank you for tailoring it to our needs.

Cheers!

## **Intervention Protocol - Week 1**

### **Materials Needed:**

- Monitoring forms and pens
- Week 1 handout: Preparing to Stop Smoking
- GP letters (Zyban and NRT)
- Prescriptions to take to pharmacists for NRT (Letter of Recommendation pad)
- List of pharmacists who can prescribe NRT (PGD list)
- Self-help material: NHS booklets (Don't Give Up Giving Up)
- Zyban handout
- Name cards
- NRT samples

Arrive 15 minutes early to organise environment and materials. Start off with fewer chairs than people expected to attend so group more inviting to join.

### **1. Assessment**

As clients come in greet them, ask them to take a seat and complete the monitoring form up to the section on 'carbon monoxide'. This includes assessment of nicotine dependence, a health questionnaire and measure of confidence levels. Informally liaise with group members and use monitoring form to identify any health problems, mental health or sensory difficulties group members may have.

### **2. Introductions**

Pass round name cards and ask clients to write their first name in big letters on the front. When everyone seated, 'Welcome everybody, its great to see you all here. I'm ..... one of the smoking cessation advisers from Camden PCT Stop Smoking Service'.

### **3. About Programme**

- Based on research evidence
- Quitting with others makes an enormous difference.
- Help and responsible for each other
- Opportunity to share experiences, suggestions for overcoming difficulties and inspiring others with your success.
- 7 week course
- Two weeks preparation
- Last cigarette before 3<sup>rd</sup> session
- 60-70% will quit; no reason why can't be you
- Abstinence approach – discuss rationale. Ask if anyone in the group has tried to cut down before. Ask them if they mind describing what happened. Use these examples to explain rationale of an abstinence approach, i.e., cutting down is generally not effective because you still experience cravings and withdrawal, each cigarette becomes more precious and you are likely to slowly increase your cigarettes back to old levels.

#### 4. Increasing Motivation

Really pleased to see you here for 2 reasons: – most important thing can do for health; benefits are enormous both in short and long-term and can see you're really motivated to give up.

#### 5. Pros and Cons

- Reasons why may want to and may not want to give up. For example, ask group members; Do any of you enjoy smoking?
- Need to acknowledge pros and cons - can reach informed decision that this is something you really want to do.

#### 6. Preparation - planning responses to triggering situations

- Identify difficult times e.g. first thing in the morning. Do people have breakfast? Many smokers have a cigarette for breakfast so having something to eat can be a simple but effective change.
- Important to prepare and then have all the things that will help you at the ready for when you quit

#### 7. Serious Attempt - encouraging commitment to the group

We do ask you to make this a serious attempt – it is very easy to say I will give up on mon and then give in at 11 am and say I'll do it next week. This is why we set a quit date and do it together.

#### 8. Group Introductions

Opportunity to share your experiences. "So it would be nice if you could introduce yourself and explain why you want to quit and why now. Who would like to start?"

#### 9. NRT Rationale/Explanation

- Nicotine is addictive part
- Brain used to it and crave when it doesn't get it
- NRT provides a supply of nicotine into the blood stream to reduce withdrawal symptoms and cravings.
- Research suggests NRT doubles your chances of success
- All NRT is a 12 week course.
- The main reason NRT does not work because it is not used enough.

#### 10. Nicotine replacement therapy (Show items and pass round group)

- **Patch** (One per day)
  - Provides a continuous delivery of nicotine into blood stream
  - 2 types; 24 hour and 16 hour. 24 hr may be more suitable if get up in night to smoke and/or smoke immediately on waking.
  - Use for 4 weeks then decrease every 4 weeks (24 hr; 21mg – 14mg – 7mg) and (16hr; 15mg - 10 mg - 5mg).
  - Hairless piece of skin
  - Important to rotate location regularly.

Disadvantage; most common side effects are vivid dreams, skin irritation or slight rash

- **Inhalator** (Each cartridge lasts for 20 minute session max 12 a day).
  - Put a cartridge of nicotine into holder and inhale till there's no more taste.

- Can give hit to back of throat
- Some like it because it reminds them of hand to mouth action; others hate it for the same reason.

Disadvantage; Have to puff on it about 10 times to get the equivalent of one puff of a cigarette

- **Nasal spray** (up to 64 puffs a day)
  - Good for heavily dependent smokers - get quick hit of nicotine.
  - Spray up the nostrils.

Disadvantage: eyes water and sneezing initially, but soon get used to it

- **Micro-tab** (can use up to 24 a day).
  - Place under the tongue and dissolves
  - Slight peppery taste. Good as it is very discrete.

Disadvantage: May irritate GI system

- **Gum** (Can use 10-15 a day, recommend 4mg gum to start with. Now comes in different flavours, e.g. mint, fruit and liquorice).
  - Chew and park it. Important to park between gum and cheek as nicotine is absorbed through the mouth lining.

Disadvantage: Dislike taste, may get sore gums, irritation of Gastro Intestinal System

- **Lozenge** (Up to 18 a day, recommend 4mg lozenges to start with).
  - New product similar to the gum.
  - Mint flavoured and sugar free.
  - Chalky taste and then park it

Disadvantage: Can get soreness of gums

NRT available on prescription. We will give you a letter to take to your GP or prescription to take to the pharmacist.  
All products are equally effective. Chose the product you think would best suit you.

#### 11. Zyban (8 week course)

- Zyban as effective as NRT.
- Not sure exactly how works but thought to increase chemicals in brain that make you feel good and people find they lose the satisfaction they get from smoking; people report losing the desire to smoke.
- One tablet every day a week before you quit to allow the drug to build up to a sufficient level.
- 2 tablets a day on the 7<sup>th</sup> day when you stop.
- Address scare stories in press a few years ago
- Important that Zyban is appropriately prescribed because of contraindications (e.g., epilepsy, taking anti-depressants).

Disadvantage; Most common side-effects are dry mouth and insomnia

**“Important to remember with NRT and Zyban that these are not miracle cures. They are there to help reduce the physical cravings to enable you to manage the habit side of giving up.”**

**12. Key points**

- Commitment to attend every week.
- Are they ready to stop?
- The goal is complete abstinence.

**13. Open Question**

- How do you feel now? Are you coming next week? Any Qs?

Remember quit date is in two weeks time. Keep smoking normally. It is important to use time to prepare.

**14. Next week**

- Strategies to help with quitting
- If tried to quit before, think about what has and hasn't worked for you in the past
- Make an appointment with your GP between now and next week if you want to use Zyban as you need to start taking it a week before quit day

**15. Distribute handout** and explain contact numbers are on back if want to talk before next week

**16. NRT/Zyban Prescription**

Assess suitability for NRT/Zyban on an individual basis with each group member and write appropriate letter of recommendation to GP or pharmacist.



## **Week 2**

### **Materials Needed:**

- Monitoring form and pens
- CO monitor (x2) with tubes
- Name cards
- Week 2 handout: Final Preparation
- List of pharmacists who can prescribe NRT (PGD list)
- GP letters (Zyban and NRT)
- Prescriptions to take to pharmacists for NRT (Letter of Recommendation)
- Quiz

Arrive 15 minutes early organise environment and materials. Start off with fewer chairs than people expected to attend so group more inviting to join.

### **1. Ask participants to complete Monitoring form**

Welcome.

"We are pleased that you are here for the second week which shows that you are really motivated".

### **2. CO Monitoring – Explain the rationale**

"Carbon Monoxide is a toxic gas that is inhaled when smoking a cigarette. It takes the place of oxygen, making the blood thicker and the heart work harder. However, levels of CO go down when you stop smoking and it can be very motivating to see that you are doing something positive for your health."

Take participants CO readings with permission.

### **3. Facilitate Group Discussion**

Go round the group asking how they feel about quitting, past experiences of quitting and whether last weeks discussion was useful. (Check all Zyban users have started on Zyban, one tablet a day).

### **Strategies for behavioural change**

Introduce discussion on tactics that can be used to tackle situations often associated with smoking.

#### **• *Lifestyle changes***

These are needed e.g. avoiding first cigarette of the day. Discuss times group members associate with smoking e.g. answering the phone, waiting for a bus, going to the pub. Suggest alternatives, e.g., glass of orange juice instead of coffee, chopping up fruit and having it ready prepared in the fridge to nibble on, taking deep breaths, changing routine e.g. walking different way to work, not sitting in chair where would normally smoke.

#### **• *Reaction to life events***

A time most people find difficult is in response to a stressful situation. It is important to remember that smoking doesn't relieve stress - it actually increases blood pressure but is the way you are used to dealing with it. Discuss alternative ways of coping e.g., deep breathing or act on the situation.

#### **• *Relaxation***

People often justify being able to relax in a chair and take time away from kids/work by having a cigarette. Remind it is ok to just sit and do nothing,

- ***Distraction***

Many people find it helpful to join a gym, go for walks or to take up a new hobby to keep themselves busy and distract their attention.

- ***Ways of Thinking***

Think of all the benefits of giving up (e.g., health, more money) and the things you don't like about smoking (e.g., smell, being controlled by cigarettes). Ask yourself will having a cigarette change the situation? The problem will still be there after the cigarette.

- ***Dealing with cravings***

Remember cravings only last a few minutes, so its important to do something during this time, e.g., change environment, such as leaving the pub and taking deep breaths, using a piece of gum. Washing up after a meal!

- ***Reward yourself***

Important to congratulate yourself on success. Think about all the money you will save. One idea is to put the money you would normally spend on cigarettes in a jar and then treat yourself to something you really like, for example, new clothes, books or good food.

Generate discussion with group about when they feel they might have difficulties not having a cigarette and discuss strategies that may help in these situations.

Important to emphasise that ideas how to tackle events need to come from individual. Understand may be resistant to change but emphasise that small changes can help and this may be great opportunity for new healthy lifestyle or at least to give these options a chance.

#### **4. Increasing Motivation**

Giving up should be a positive event. Shortly after giving up should experience positive changes such as breathing easier, better circulation and sense of taste and smell with improve.

#### **5. Quiz**

Divide into groups of two or three and ask them to decide on the answers to a brief quiz. Allow 5-10 minutes. Distribute the questionnaires once the subgroups are formed. Discuss answers in the large group (this is mainly to stimulate interaction).

#### **6. Removing smoking cues before quit day - explain what will happen next week**

"Have your last cigarette outside the clinic with the rest of the group. Bring along all your old cigarettes, ashtrays, and lighters so we can have a ceremonial throwing away. Go through all your pockets, drawers etc. to remove all tobacco/cigarettes. NRT users must bring along their NRT so you can start using it in the group and we can answer any questions".

#### **7. Remind of personal responsibility to group**

Explain that if clients attend next week then they will be taking some responsibility for the rest of the group and encourage only those who are really determined to take part. We ask you to take this chance seriously. If you decide not to come to the next week, you are always welcome to come to a new group in the future.

#### **8. Distribute handout**

## **Week 3**

### **Materials Needed:**

- Monitoring forms and pens
- CO monitor (x2) with tubes
- Buddy cards
- Week 3 handout: Your first week without smoking
- Scissors to open patches
- Name cards

### **1. Monitoring Form**

Ask participants to complete monitoring form

### **2. CO Monitoring**

Re-iterate rationale and take CO readings of group members

- 3. Welcome** - its really good to see you all back this week on quit day which shows that you are really motivated to stop smoking.

### **4. Group Discussion**

How was your week?

How do you feel about quitting today?

What steps have you taken to prepare to stop smoking?

### **5. Nicotine Replacement Therapy**

- "Have you brought your NRT with you?"
- Re-emphasise rationale – provides nicotine in a clean form to enable habit side of addiction to be tackled.
- Assist group members to start using the NRT
- Answer any questions
- Ensure use recommended dose and complete 12wk course

### **6. Emphasise abstinence**

"A good start is really key – if you can get through the first week without a puff you're 10x more likely to succeed in the long term. Although if you do relapse, try and see it as a learning experience. Think about why you had the cigarette and think about what you could do differently if you were in the same situation again".

### **7. Social Support**

It is really important to get as much help and support during this time as you can. We can give you the opportunity to call others from the group if you want to which can really help – is this something that you would like to do? (If yes, ask clients to get into pairs (and a 3 if odd numbers) and to swap contact details and arrange day and time of first call. Explain that it is not obligatory but useful to get as much support as possible.

Remember you can always call us – no.s are on the back of each handout.

Recommend that it helps to tell someone e.g. family member, friend, most who don't regret it later.

### **8. Create Realistic Expectations as to how may feel in next week**

- Explain that they may miss cigarettes, feel a sense of loss or feel a bit miserable and emphasise that this is common and ok.
- Remember and hold on to reasons why you want to give up, how you came to

the decision to give up e.g., the pros and cons

- Remember these feelings will subside and ex-smokers eventually feel calmer and less stressed than when they were smoking
- Go through possible withdrawal symptoms and explain why these can be possible signs of improving health e.g. cough - hairs clearing out dirt, disturbed sleep - improved oxygen supply to the brain, tingling in toes and fingers - improved blood circulation.

**9. Clarify rest of Programme**

- 4 more weeks
- Certificate at end if not smoked
- Important to attend all sessions to fulfil commitment to other group members, maintain motivation and get support.

**10. Discard Items/Goal Setting/Behavioural Contracting**

As throw items (e.g., cigarettes, ashtrays) away make a promise to the group that you feel comfortable with and can achieve e.g. I will not smoke next week, tomorrow or this evening.

**11. Distribute handout**

## **Week 4**

### **Materials Needed:**

- CO monitor (x2) with tubes
- Monitoring forms and pens
- List of pharmacists who can prescribe NRT (PGD list)
- GP Repeat Prescription letters (Zyban and NRT)
- Prescriptions to take to pharmacists for NRT (Letter of Recommendations)
- Name cards
- Week 4 handout: Second and Third weeks without smoking

### **1. Monitoring Form**

Ask participants to complete monitoring form

### **2. CO Monitoring**

Take CO readings of group members

### **3. Facilitate Group Discussion:**

- Ask how they got on the previous week, ask if they have smoked if they haven't volunteered information, any withdrawal symptoms.
- How getting on with NRT/Zyban, check how much NRT using, (e.g., how many pieces of gum), side effects, – talk about these and ease any anxiety
- Discuss if found any situations particularly difficult and how coped– congratulate on progress to increase confidence and motivation.
- If there have been lapses, how they have coped – what new coping strategies have people developed.
- After each has had a turn, allow group members to ask questions and offer suggestions to one another.
- Has anyone noticed any positive changes? (CO is now that of a non-smoker, heart working more efficiently, lungs working more efficiently - less breathless, smell/taste heightened).
- Re-emphasise need for lifestyle changes, using support (e.g. buddy, calling us), taking care of yourself, giving rewards for hard work.

### **4. Distribute Handout**

### **5. Address any questions from the group**

### **6. Reaffirmation;**

Reaffirm commitment to group and goal setting e.g. intentions to abstain from smoking this week, plans for the week ahead to help you remain a non-smoker. Go around group and have each member state these in their own words.

## **Week 5**

### **Materials Needed:**

- CO monitor with tubes
- Monitoring forms and pens
- Week 5 handout: Coping with a lapse
- List of pharmacists who can prescribe NRT (PGD list)
- GP Repeat Prescription letters (Zyban and NRT)
- Prescriptions to take to pharmacists for NRT (Letter of Recommendations)
- Name cards

### **1. Monitoring Form**

Ask participants to complete monitoring form

### **2. CO Monitoring**

Take CO readings of group members

### **3. Facilitate Group Discussion**

- Ask how they got on the previous week, ask if they have smoked if they haven't volunteered information, any withdrawal symptoms
- How getting on with NRT/Zyban, check how much NRT using (e.g., how many pieces of gum), side effects – talk about these and ease any anxiety
- Discuss if found any situations particularly difficult and how coped– congratulate on progress to increase confidence and motivation.
- If there have been lapses, how have coped – what new coping strategies have people developed.
- After each has had a turn, allow group members to ask questions and offer suggestions to one another. Has anyone noticed any positive changes? (CO is now that of a non-smoker, heart working more efficiently, lungs working more efficiently - less breathless, smell/taste heightened).
- Re-emphasise need for lifestyle changes, taking care of yourself, giving rewards for hard work.
- Encourage group to give support and re-affirm use of buddy. If anyone is smoking, stress the importance of using the opportunity of the group to give up completely.

### **4. Distribute Handout**

Discuss if lapse occurs to view as a learning experience and get straight back on track. Throw away any remaining cigarettes and plan for future risky situations.

### **5. Social Support**

Ask about pressures and support from people in their lives; ask about support from group members—would anybody like more or different support. Encourage use of telephone list.

### **6. Increase Motivation/Clarify end Goal.**

Inform group about their certificate which they can receive at the end of the group, week 7. Explain that will only be able to give out certificates to those who are completely abstinent from now on.

**7. Reaffirmation:** of commitment to the group and goal-setting; intention to abstain from smoking for this week and statement of what you plan to do if a risky situation arises. Go around group and have each member **state these in their own words.**

## **Week 6**

### **Materials Needed:**

- CO monitor with tubes
- Monitoring forms and pens
- Name cards
- NRT/Zyban repeat prescription request letters
- List of pharmacists who can prescribe NRT (PGD list)
- Prescriptions to take to pharmacists for NRT (Letter of Recommendations)
- Week 6 handout: Staying off cigarettes

### **1. Monitoring Form**

Ask participants to complete monitoring form

### **2. CO Monitoring**

Take CO readings of group members

### **3. Facilitate Group Discussion**

Open discussion. Led by group about experiences of last week.

- Ask how they got on the previous week, ask if they have smoked if they haven't volunteered information, any withdrawal symptoms. Ask about any benefits group members have noticed (for example, improved breathing) to encourage motivation
- Ask about use of NRT/Zyban to check using enough/correctly and to answer any questions
- Discuss if found any situations particularly difficult and how coped– congratulate on progress to increase confidence and motivation.
- Re-emphasise need for lifestyle changes, taking care of yourself, giving rewards for hard work.
- Encourage group to give support, ask about use of buddy. If anyone is smoking, stress the importance of using the opportunity of the group to give up completely.

### **4. Distribute Handout**

### **5. Reaffirmation:**

Reaffirm commitment to the group and goal-setting; intention to abstain from smoking for this week and statement of what you plan to do if a risky situation arises.

### **6. Outline Week 7 (last session).**

Ask group if they would like to bring in a few snacks, we will supply tea/coffee to mark the end of the weekly groups and celebrate success. Explain that other ex-smokers who successfully attended previous local groups joining. Emphasise helps prevent relapse if stay in contact with the service.

## **Week 7 - Relapse Prevention Session**

### **Materials Needed:**

- CO monitor with tubes
- Monitoring forms and pens
- Name cards
- NRT/Zyban repeat prescription request letters
- List of pharmacists who can prescribe NRT (PGD list)
- Prescriptions to take to pharmacists for NRT (Letter of Recommendations)
- Week 7 handout: Relapse prevention and relapse prevention NHS booklet

### **1. Monitoring Form**

Ask participants to complete monitoring form **and the feedback questionnaire**

### **2. CO Monitoring**

Take CO readings of group members

### **3. Facilitate Group Discussion - discuss ideas on relapse prevention**

- Encourage everyone to discuss experiences how feeling, how aim to continue not smoking after end of weekly group sessions.
- Discuss some common situations associated with relapse, e.g., being around smokers, negative mood and when drinking. Encourage clients to think about what they would do if tempted to smoke in these situations.
- Suggest possible behavioural coping strategies such as drinking water and deep breathing and discuss cognitive coping strategies such as thinking of the health and financial benefits of being a non-smoker.

### **4. Congratulations and Certificates.**

Congratulate on achieving best thing can do for their health. **Hand out certificates** to those who successfully completed programme (i.e., who have not smoked for the last two weeks or longer).

### **5. Provision of Ongoing Support**

**Offer the option to call us** before having a cigarette if tempted or after relapse before go back to smoking; prevention better than cure. Explain that they will be contacted after 1 year to see how they are doing.

### **6. NRT**

Ensure everyone has enough to complete the 12 week course

**7. Reaffirmation:** of commitment to the group and goal-setting; of intention to abstain from smoking. What other strategies have they planned now the weekly sessions have finished? Go around group and have each member state these in their own words.

### **8. Give out relapse prevention handout and relapse prevention NHS booklet**

### **9. Ex-smokers from other Camden groups join celebration**

Facilitate group discussion between current members and previous group members



**Feedback from the Stop Smoking Groups in response to: What did you think of the Smoker's Clinic groups overall? What did you find the most useful? How could we improve?**

**Feedback from the Stop Smoking Group (CR03)**

- It is an excellent method for smokers desperate to stop smoking. I am amazed of the support I got and the encouragement after each session. I still find it too short or perhaps after 7 weeks we could meet every month as we wean off the patches. You are our 'mental patches'.
- The groups were tremendously useful in identifying what I was going through wasn't unusual. The most useful thing about the group I found was the carbon monoxide testing.
- The group was very good it was easier to give up and stay stopped with the support and encouragement of others. It was helpful to share experiences. The room was a bit cold! Tea/Coffee would have been nice.
- Group was very good and supportive. It would be very useful to hold a couple of follow-up sessions over the next few months

**Feedback from the Stop Smoking Group (CR04)**

- For me the most helpful feature of the course was hearing about other people's experiences of stopping smoking and the strategies they found helpful in staying clear.
- The information sessions were very useful. The group is really helpful.
- General support of each others situation, contact numbers were a good idea.
- Thank you! I have not smoked for a month, which is something that was unimaginable for me a month ago. Hope to see you in 7 weeks as a non-smoker still.
- Informative, good support, group helpful as you are all in the same boat.
- It was useful to know that others have the same experiences.
- Group motivation, mutual support was very positive.

**Feedback from the Stop Smoking Group (CR06)**

- The discussion and support of staff and members of group.
- It was very good to have the group where we could share the experience and advice.
- I found the smoker's clinic very helpful. It kept me going when I was having doubts and it was really useful sharing my problems and experiences with others that were trying to give up. I would strongly recommend the group to others. I don't think I would have been able to give up otherwise.
- Exchange of information. Perhaps by being more directive - you were too 'nice' when I repeatedly relapsed.
- Very useful. The most useful aspect was discussing with other group members of

successes, difficulties etc. When giving up I would suggest the service could be improved by lasting a few more weeks. I feel that people may feel more confident to count on their own 8 weeks after quitting.

#### Feedback from the Stop Smoking Group (TH02)

- I like the sitting around and just talking about our experiences for as long as we wanted
- Good feeling of empathy from group members and co-ordinators. Co-ordinators have extensive knowledge/experience of what we might be feeling.
- NRT, group dynamics.
- Very good! There was good communication on this course this avoided this course becoming too intense and potentially off-putting. Glad it focused on the positive aspects of giving up and not too much on the negative health aspects.
- Group is great. Support of other people going through the same. Follow up sessions for the first year.
- Very good. The group was very supportive and helped having a buddy to share it with.
- Giving up together worked. I didn't think I could do it when I started. Will miss the meetings.
- Being with others REALLY helps. Bit strange having people in the group who haven't given up - not sure how I feel about that - glad they feel comfortable and want to be there but not sure how they contribute.
- Very useful, very happy that I came along. Friendly and informal.

#### Feedback from the Stop Smoking Group (CR08)

- Should have sessions closer together (e.g. twice a week). Counsellors were polite and honest and straightforward. Too nice to people who keep smoking. Thanks to people in the group and the people who run groups.
- I found the group staff very supportive and were very encouraging in helping group members to support each other.

#### Feedback from the Stop Smoking Group (CR09)

- I thought it was very useful in providing a source of support and commitment. Also good for a reliable source of information.
- The group was helpful. The most useful was the prescription of NRT/Zyban. You're doing fine.
- I found the group very helpful. I found a lot of support from the group.
- To start ASAP. Don't leave it until tomorrow. Be totally honest with yourself about smoking and your habits. Smoking is an addiction. Read Alan Carr and use NRT. The group was very good. A lot depends on the individuals themselves and the dynamics of the group. The group should be open to other forms of quitting smoking, it was too

NRT focused. Most useful seems meeting heavy smokers, with serious health concerns, highlighting in a very real sense the dangers of smoking that smokers avoid and are in denial of.

**Feedback from the Stop Smoking Group (CR12)**

- Very useful - group format - self-supporting. Counsellors approach better than practice nurse i.e. more knowledgeable about NRT & what suits whom. Explanations of handouts/cravings & psychological stuff really useful. Group format helps re-enforce & reminding of why we gave up.
- Excellent experience. Group definitely increased motivation and ease of quitting. I was very convinced by NRT information, and found it useful.
- Very supportive and informative. I found the experience of other smokers very reassuring, knowing I wasn't suffering alone. Personally a later start would have been helpful. The availability of group leaders and assistance was fab!

**Feedback from the Stop Smoking Group (CR17)**

- Multi activity approach.
- Excellent - don't think I could have done it without the support for group. Could have done with more info about Zyban.
- I smoked 40 a day. With the gum I can get by with two cigs a day. This course has shown me that I don't have to chain smoke. Thank you very much for showing me the error of my ways.
- I found it very helpful. Listening to other people's problems on giving up. Maybe having more groups in Camden
- Very Good
- Thought it was excellent
- Smokers clinic groups was useful because there are people the same as you to help you
- Listening to others comments and feedback. Have someone come to one of the sessions who has successfully stopped post NRT for encouragement

**Feedback from the Stop Smoking Group (CR18)**

- Excellent. Great support and management. Review group.
- Overall very helpful. I found it useful to listen to others experiences. The leader was good at getting people to articulate strategies for not smoking.
- It is very helpful to be in the group and share the experience. But even though we are all very determined, we still couldn't do without the treatment - so it's all helped.
- Excellent and it seems a shame to end it after a month.
- I thought it was useful to share experiences and discuss different ways of overcoming "vulnerable" times. The course was good. Possibly a little more could be made of the effectiveness/side effects of different forms of NRT.

Feedback from the Stop Smoking Group (CR19)

- Learning from each other, sharing experiences you thought you were going through alone. Helping each other by offering encouragement.
- Interactions with others who are quitting good. It was almost fun at times trading stories about temptations, gluttony, cravings etc.
- Brilliant! Very helpful, other peoples comments about how they felt.

Feedback from the Stop Smoking Group (CR20)

- Sharing stories was definitely a great help. Remove time-wasters from the group.
- Very useful giving up with others: sharing problems & suggested solutions. Good to have others to talk to about giving up (and not boring family/friends)
- Very good, most helpful
- Coming back every week. Advice from others. Would be nice to see everyone again in six months.
- A very supportive unit

**Feedback Questions**

1. The group started two weeks before the quit date. Did you find this preparation period?

|           |             |          |
|-----------|-------------|----------|
| Too Short | About Right | Too Long |
| 5.5%      | 89.5%       | 5%       |

2. In the information session (first session), did you feel you received enough information about Nicotine Replacement Therapy and Zyban to make a good choice?

|            |             |          |
|------------|-------------|----------|
| Not Enough | About Right | Too Much |
| 6%         | 94%         | 0%       |

3. The course lasted for 7 weeks. Did you feel this was?

|           |             |          |
|-----------|-------------|----------|
| Too Short | About Right | Too Long |
| 36%       | 62%         | 2%       |

Camden Stop Smoking Service  
Ground Floor, West Wing  
St Pancras Hospital  
4 St Pancras Way  
London  
NW1 0PE

Tel: 020 7445 8531  
Fax: 020 7445 8556

Dear «Name»

**Re: Registration as a Level 2 – Community Stop Smoking Advisor**

Thank you for attending and completing the Level 2 training programme. At the training we informed you that there would be a cooling off period to enable you to fully consider and discuss with your service manager, the feasibility of your providing patients with 5 sessions of stop smoking support, in addition to the other duties and responsibilities of your post.

We are now able to offer you a place as a Level 2 Community Stop Smoking Advisor for Camden Stop Smoking Service. We would like you to spend some time reviewing the commitment that you make by signing up as a level 2 advisor, as well as the benefits that you will receive. These are outlined in the terms and conditions in the service level agreement, which we would like you to return to us. These are based on National Guidelines for what constitutes effective level 2 advice. You should keep the terms and conditions sheet, so that you have a record of what we expect from you and what you can expect from us.

- If you feel that you are able to offer a service in line with the terms and conditions, please complete, sign and return the form attached (page 3). A copy will be sent to you for your own records.
- Please also complete and return the enclosed advisor information sheet. This will enable us to ensure that we are able to get in touch with you and give your correct details to our call centre.

If you have any additional queries regarding the terms and conditions, please contact us on 020 7445 8531.

Looking forward to hearing from you.

Best wishes

*Camden Stop Smoking Team*

# *Service Level Agreement*

## **Level 2 – Community Stop Smoking Advisors Terms and Conditions**

***Updated July 2005***

### *Your Commitment is to:*

1. Provide 5 sessions per quitter of one to one evidence-based stop smoking treatment and behavioural support as outlined in the training.
2. **Fully** complete and return monitoring forms by the deadlines to the Stop Smoking Service.
3. Follow the treatment protocol outlined in the level 2 training session (and any new changes to the protocol that are implemented following the training).
4. Maintain the carbon monoxide monitor provided to you in accordance with the manufacturers instructions and the service requirements *(to be delivered to you once you have registered)*.

### **Maintaining your skills:**

5. In order to maintain your clinical skills you should aim to provide regular support to quitters throughout the year (we suggest a minimum of 5 clients per quarter).
6. Attend a minimum of one update, seminar or event each year aimed at level 2 advisors that has been organised by the Stop Smoking Service (locum fees are paid to enable Level 2 advisers who are pharmacists to attend).
7. Attend an update session if you are inactive for a period of 6 months or more to ensure that you are up to date and fully equipped to offer support before seeing new clients.

### **Communication with the Specialist Stop Smoking Service:**

8. Keep in regular contact with your locality Stop Smoking Advisor and discuss any problems in service delivery.
9. Inform the service giving 1 months notice if you are moving premises or offering services from additional premises.
10. Inform the service giving 1 months notice if you are no longer able to carry out Level 2 work and return the carbon monoxide monitor and other resources to the service.

### *Our Commitment is to:*

1. Provide regular update training, which will be offered at a variety of locations and times.
2. Re-calibrate CO monitors as recommended by the manufacturers.
3. Provide paperwork and materials (i.e. mouthpieces) necessary to provide level 2 services.
4. Provide a named Specialist Stop Smoking Advisor for your locality who will provide you with regular support and advice.
5. Arrange payment for return of fully completed monitoring forms.
6. Provide ongoing feedback and evaluation of your performance, this may include contacting some of your clients.
7. Provide support to advisors who are experiencing problems within any aspect of the service.
8. Give you 1 month's notice if we intend to end your agreement to provide Level 2 services.

# *Service Level Agreement*

## *Level 2 – Community Stop Smoking Advisors*

I have been provided with a copy of the terms and conditions (*updated July 2005*), which I have kept in my records. I agree to adhere to the aforementioned terms and conditions of the agreement for the period of time that I am providing Level 2 Community Stop Smoking support.

Title: \_\_\_\_\_ Name: \_\_\_\_\_  
\_\_\_\_\_

Job Title: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

Mobile: \_\_\_\_\_ Email: \_\_\_\_\_

Work Place Name & Address: \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Postcode: \_\_\_\_\_

Languages Spoken: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ Date: \_\_\_\_\_

**Please fax or post this form to:**

**Camden Stop Smoking Service,  
Ground Floor, West Wing,  
St Pancras Hospital, 4 St Pancras Way,  
London, NW1 0PE.**

**Tel: 0207 445 8531**

**Fax 0207 445 8556**





## Monitoring Form

### Client's Details

|   |  |   |  |
|---|--|---|--|
| <b>Advisor Number:</b>  |  | <b>Client Number:</b>   |  |
| <b>First Name:</b>  |  | <b>Surname:</b>   |  |
| <b>Address:</b>   |  |   |  |
| <b>Postcode:</b>  |  | <b>Date of Birth:</b>   |  |
| <b>Home Tel:</b>  |  | <b>Mobile:</b>  |  |
| <b>Work Tel:</b>  |  | <b>Email:</b>   |  |
| <b>Sex:</b> Male <input type="checkbox"/> Female <input type="checkbox"/> |  | <b>Pregnant :</b> Yes <input type="checkbox"/> No <input type="checkbox"/> E.D.D / / (dd/mm/yy) |  |

Please choose the ethnic group which best describes you.

- |   |   |
|---|---|
| <input type="checkbox"/> 1. White British                 | <input type="checkbox"/> 10. Asian/Asian Brit - Bangladeshi |
| <input type="checkbox"/> 2. White Irish                   | <input type="checkbox"/> 11. Asian/Asian Brit - Other       |
| <input type="checkbox"/> 3. White Other                   | <input type="checkbox"/> 12. Black/Black Brit - Caribbean   |
| <input type="checkbox"/> 4. Mixed White & Black Caribbean | <input type="checkbox"/> 13. Black/Black Brit - African     |
| <input type="checkbox"/> 5. Mixed White & Black African   | <input type="checkbox"/> 14. Black/Black Brit - Other       |
| <input type="checkbox"/> 6. Mixed White & Asian           | <input type="checkbox"/> 15. Chinese                        |
| <input type="checkbox"/> 7. Mixed Other                   | <input type="checkbox"/> 16. Turkish                        |
| <input type="checkbox"/> 8. Asian/Asian Brit – Indian     | <input type="checkbox"/> 17. Any other ethnic group         |
| <input type="checkbox"/> 9. Asian/Asian Brit – Pakistani  | <input type="checkbox"/> 18. Not stated                     |

### Contact with Service

How did you hear about our service?

- |  |  |
|--|--|
| <input type="checkbox"/> GP                                    | <input type="checkbox"/> Family/Friends  |
| <input type="checkbox"/> Practice Nurse                        | <input type="checkbox"/> From a previous user of the service                                 |
| <input type="checkbox"/> Pharmacist                            | <input type="checkbox"/> Newspaper/Magazine _____  |
| <input type="checkbox"/> Other Professional                    | <input type="checkbox"/> Tube/Bus shelter  |
| <input type="checkbox"/> NHS Quitline                          | <input type="checkbox"/> Other (please specify) _____  |
| <input type="checkbox"/> Sure Start ( <i>member no</i> ) _____ | Did you go through the call centre? Yes <input type="checkbox"/> No <input type="checkbox"/> |

### GP Details

**Name:** \_\_\_\_\_ **Practice:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Postcode:** \_\_\_\_\_ **Tel:** \_\_\_\_\_

## Smoking Behaviour

How many cigarettes do you smoke a day?

How soon after waking do you smoke your first cigarette of the day?

☐ Less than 5 mins

☐ 5-15 mins

☐ 15-30 mins

☐ 30-60 mins

☐ 1-2 hours

☐ More than 2 hours

## Details of counselling sessions

| Session         | Date | Attended?<br>1.Yes<br>2.Phone<br>3.No | Date of last<br>cigarette | CO<br>Reading | Therapy<br>(to be) used* | Quit<br>date |
|-----------------|------|---------------------------------------|---------------------------|---------------|--------------------------|--------------|
| 1 (preparation) |      |                                       |                           |               |                          |              |
| 2 (quit date)   |      |                                       |                           |               |                          |              |
| 3 (support)     |      |                                       |                           |               |                          |              |
| 4 (support)     |      |                                       |                           |               |                          |              |
| 5 (support)     |      |                                       |                           |               |                          |              |

\* NRT [Patch, Gum, Lozenge, Inhalator, Microtab, Nasal Spray] OR bupropion (Zyban)

Has client smoked in the last 2 weeks? Yes ☐ No ☐ Lost to follow up ☐

The Department of Health require that the patient has NOT smoked for at least the last two weeks of the quit attempt.

## Consent

I understand the reasons for collecting this personal information and agree to the information that I have provided, being used for evaluation purposes. I agree to be contacted again for follow up.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Advisor

Name: \_\_\_\_\_ Registration number: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

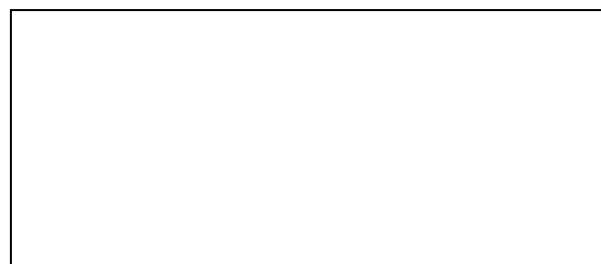
Please return this form to us as soon as possible to:

Camden Stop Smoking Service  
Ground Floor, West Wing  
St Pancras Hospital  
4 St Pancras Way  
NW1 OPE

Tel: 020 7 445 8531  
Fax: 020 7 445 8556

450

**GP/Pharmacy stamp**



# Stop Smoking Treatment Protocol

*This guidance will provide you with an outline of what you need to do at each session*

## Materials

- Treatment protocol
- Monitoring form
- CO monitor and mouthpieces
- Nicotine Replacement Therapy – Patient group direction if applicable
- Supporting literature e.g. information on stopping smoking/ information sheets on NRT / bupropion

## Session 1 (Assessment, up to 30 mins) One week before Quit date

1. Discuss motivation to stop. Are they ready to stop now?
2. Discuss current and past smoking habits (this will help completion of the monitoring form)
3. Encourage client to weigh up pros and cons of stopping and think about coping strategies
4. Assess whether to continue or refer to specialist clinic
5. Explain the treatment package and fill out the relevant sections of the monitoring form
6. Talk about NRT and Zyban and allow client to choose preferred product (s)
7. Set the quit date with the client which will be the date of the next appointment
8. Explain about CO and take reading
9. Ask client to sign consent – explain the information is very important in order for us to monitor and improve service

## Session 2 (Quit date, 15 mins)

1. Confirm readiness to stop now
2. Check client has NRT or has taken Zyban for a week
3. If using NRT ask client to start using it with you to ensure it is used correctly
4. Take CO reading
5. Discuss with client their coping strategies for when they would normally have a cigarette
6. Make next appointment

## Session 3-4 (Follow up, 15 mins)

1. Ask about smoking status and discuss how the client found the previous week
2. Congratulate on achievement
3. Discuss difficult situations and coping strategies
4. Take CO reading
5. Ensure client is using medication properly and is using enough
6. Answer queries and make next appointment

## Session 5 (Final Session, 15 mins)

1. As in sessions 3 & 4
2. Congratulate client if successful
3. Complete monitoring form and send to Camden PCT

**Trial Eligibility Form**

| <u>TRIAL ELIGIBILITY FORM</u>  | Yes | No | Unclear,<br>with<br>details |
|--|-----|----|-----------------------------|
| <b>Design:</b>   |     |    |                             |
| RCT (where control group receives placebo, no intervention or different type of psychological maintenance intervention)  |     |    |                             |
| Data available for 12 months or more (after completion of initial weight loss treatment)   |     |    |                             |
| <b>Participants:</b>   |     |    |                             |
| Adults overweight or obese at study baseline according to any parameter (e.g., BMI, waist measurement, waist-to-hip ratio)                                       |     |    |                             |
| Average or median age of all groups 18 years or older  |     |    |                             |
| The study does not deal with patients receiving active treatment for psychiatric disorders   |     |    |                             |
| The study does not deal with eating disorders such as anorexia, bulimia nervosa, binge eating disorder etc.  |     |    |                             |
| <b>Intervention:</b>   |     |    |                             |
| The study has a weight loss maintenance intervention, one of which is psychological and the type of psychological maintenance intervention is clearly identified |     |    |                             |
| The focus of the study is <i>not</i> predominantly to investigate spouse or family support; exercise or diet; monetary incentives or drug treatment              |     |    |                             |
| <b>Outcome:</b>  |     |    |                             |
| One outcome is a measure of overweight or obesity according to any parameter (e.g., BMI, waist measurement, waist-to-hip ratio)                                  |     |    |                             |

**Characteristics of excluded studies**

| Number | Authors  | Reason for Exclusion  |
|--------|--|---|
| 1.     | Agras et al. (1996)                            | The maintenance intervention is not psychological, it is dietary in nature  |
| 2.     | Ames et al. (2005)                             | Follow up is less than 12 months;<br>Focus is on expectations not loss.   |
| 3.     | Borg et al. (2004)                             | Observational study;<br>Intervention described as 'dietary counselling' led by a nutritionist, thus insufficient evidence that the intervention is psychological.   |
| 4.     | Dornelas et al. (1998)                         | Not a randomised controlled trial. Design is quasi-experimental.  |
| 5.     | Fogelholm et al. (2000)                        | Focus of study is exercise for weight loss maintenance.   |
| 6.     | Goodrick et al. (1998)                         | Participants were binge eating women;<br>Investigates differences in initial treatment without an explicit focus on weight loss maintenance;<br>Insufficient control group for the maintenance part of the intervention as wait list control ends after 6 month assessment. |
| 7.     | Harvey-Berino, Pintauro and Casey Gold (2002)  | Follow up is less than 12 months.   |
| 8.     | Harvey-Berino, Pintauro, Buzzell et al. (2002) | Suspicion that the sample for this study is the same sample as used in the 2004 paper included in this review;<br>The authors state clearly that the participants were not blind to the intervention  |
| 9.     | Jeffery et al. (1998)                          | Focus of study is looking at exercise for weight loss maintenance.  |
| 10.    | Lantz et al. (2003)                            | Focus of study is to evaluate a very low calorie diet, both groups receive the behavioural intervention.  |
| 11.    | Leibbrand and Fichter (2002)                   | Participants have eating disorders.   |
| 12.    | Lejeune et al. (2003)                          | Maintenance intervention is not psychological, focus of study is looking at effect of diet and exercise maintenance programs.   |
| 13.    | Lindstrom et al. (2003)                        | There is not an appropriate control as participants receive different initial interventions;<br>Intervention focuses on diet and exercise, thus insufficient evidence that the intervention is psychological.   |
| 14.    | Togerson et al. (1997)                         | Focus of study is looking at effect of diet;<br>Maintenance intervention does not include a control group which receives placebo, no intervention or different type of psychological intervention   |
| 15.    | Toubro and Astrup (1997)                       | Maintenance intervention is not psychological. Focus of study is looking at effect of diet maintenance programs.  |
| 16.    | Wadden et al. (1998)                           | Focus of study is looking at exercise for weight loss maintenance   |
| 17.    | Wing and Jeffery (1999)                        | Not a randomised controlled trial. Design is partially randomised   |
| 18.    | Wing and Jeffery (2003)                        | Follow up is less than 12 months;<br>Does not contain a weight loss maintenance intervention  |